TOSHIBA

FILE NO. 023-200502
**SUPPLEMENT**

SERVICE MANUAL

# Projection Television

# 51H85C
# 57H85C

## – SUMMARY –

51/57H85C is the same as 51/57H84 except for the parts list, SPK/CAPA and DEF POWER pcbs, and SPK/CAPA and DEF POWER schematic diagrams on back of this sheet.

Use this service manual together with the original service manual of 46/51/57H84 (File No. 020-200404 Revised.1).

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## LEAD-FREE SOLDER

This product is manufactured using lead-free solder as a part of a movement within the CE industry at large to be environmentally responsible. Lead-free solder must be used in the servicing and repair of this product.

## WARNING

**This product is manufactured using lead free solder.**

**DO NOT USE LEAD BASED SOLDER TO REPAIR THIS PRODUCT !**

The melting temperature of lead-free solder is higher than that of leaded solder by 86°F to 104°F (30°C to 40°C). Use of a soldering iron designed for lead-based solders to repair product made with lead-free solder may result in damage to the component and or PCB being soldered. Great care should be made to ensure high-quality soldering when servicing this product — especially when soldering large components, through-hole pins, and on PCBs — as the level of heat required to melt lead-free solder is high.

# CHASSIS AND CABINET REPLACEMENT PARTS LIST

**WARNING**: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THE ORIGINAL SERVICE MANUAL (File No. 020-200404 Revised.1).

**CAUTION**: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE of the original service manual (File No. 020-200404 Revised.1). Do not degrade the safety of the receiver through improper servicing.

*NOTICE:*
- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with * mark is no longer available after the end of the production.*

**Model : 51H85C/57H85C**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Capacitors ..... | CD | : | Ceramic Disk | PF | : | Plastic Film | EL | : Electrolytic |
| Resistors ..... | CF | : | Carbon Film | CC | : | Carbon Composition | MF | : Metal Film |
| | OMF | : | Oxide Metal Film | VR | : | Variable Resistor | FR | : Fusible Resistor |

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

| Location No. | Parts No. | Description |
|---|---|---|
| **#1:[51H85C]** | | |
| **#2:[57H85C]** | | |
| **CAPACITORS** | | |
| C101 | 76797339 | ELECTROLYTIO, 50V 3.3UF M |
| C102 | 76665221 | ELECTROLYTIC, 10V 220UF M 3A |
| C105 | 76100102 | CERAMIC CHIP, 50V F 1000PF Z |
| C106 | 76669479 | ELECTROLYTIC, 50V 4.7UF M |
| C107 | 76666221 | ELECTROLYTIC, 16V 220UF M |
| C108 | 76665221 | ELECTROLYTIC, 10V 220UF M 3A |
| C109 | 76100104 | CERAMIC CHIP, 25V F 0.1UF Z |
| C110 | 76794101 | ELECTROLYTIC, 16V 100UF M |
| C221 | 76503041 | PLASTIC FILM , 63V 0.1UF J |
| C301 | 76503053 | PLASTIC FILM, 63V 1UF J |
| C302 | 76669010 | ELECTROLYTIC, 50V 1UF M 3A |
| C303 | 76503053 | PLASTIC FILM, 63V 1UF J |
| C308 | 76567223 | PLASTIC FILM, 50V 0.022UF J |
| C309 | 76109102 | CERAMIC CHIP, 50V B 1000PF K |
| C310 | 76073053 | ELECTROLYTIC, 25V 100UF M 3A |
| C311 | 76109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C312 | 76109332 | CERAMIC CHIP, 50V B 3300PF K |
| C314 | 76503037 | PLASTIC FILM, 63V 0.047UF J |
| C315 | 76073020 | ELECTROLYTIC, 10V 1000UF M 3A |
| C320 | 76669101 | ELECTROLYTIC, 50V 100UF M |
| C321 | 76669101 | ELECTROLYTIC, 50V 100UF M |
| C323 | 76109473 | CERAMIC CHIP, 25V B 0.047UF K |
| C324 | 76503053 | PLASTIC FILM, 63V 1UF J |
| C325 | 76082057 | PLASTIC FILM, 100V 0.22UF J |
| C327 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C328 | 76082256 | PLASTIC FILM, 100V 2200PF J |
| C330 | 76073034 | ELECTROLYTIC, 16V 10UF M 3A |
| C332 | 76669101 | ELECTROLYTIC, 50V 100UF M |
| C333 | 76082272 | PLASTIC FILM, 100V 0.047UF J |
| C334 | 76109471 | CERAMIC CHIP, 50V B 470PF K |
| C338 | 76666100 | ELECTROLYTIC, 16V 10UF M 3A |
| C340 | 76073037 | ELECTROLYTIC, 16V 47UF M 3A |
| C361 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C362 | 76109473 | CERAMIC CHIP, 25V B 0.047UF K |
| C370 | 76669229 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C371 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C401 | 76214332 | CERAMIC DISC, 500V B 3300PF K |

| Location No. | Parts No. | Description |
|---|---|---|
| C402 | 76214391 | CERAMIC DISC, 500V B 390PF K |
| C405 | 76503041 | PLASTIC FILM , 63V 0.1UF J |
| C412 | 76828124 | PLASTIC FILM, 200V 0.12UF J |
| C415 | 76092484 | CERAMIC DISC, 2KV B 1500PF K |
| C416 | 76676220 | ELECTROLYTIC, 100V 22UF M 3A |
| C417 | 76503334 | PLASTIC FILM, 250V 1.5UF J |
| C419 | 76105331 | CERAMIC CHIP, 50V CH 330PF J |
| C420 | 76503041 | PLASTIC FILM , 63V 0.1UF J |
| C422 | 76109102 | CERAMIC CHIP, 50V B 1000PF K |
| ⚠ C423 | 76503252 | PLASTIC FILM, 400V 0.3UF J |
| ⚠ C425 | 76503142 | PLASTIC FILM, 400V 0.27UF J |
| C426 | 76211222 | CERAMIC DISC, 2KV B 2200PFK |
| C432 | 76567333 | PLASTIC FILM, 50V 0.033UF J |
| ⚠ C440 | 76503059 | PLASTIC FILM, 1800VH 1000PF H |
| ⚠ C443 | 76503099 | PLASTIC FILM, 1800VH 4700PF H |
| ⚠ C444 | 76503347 | PLASTIC FILM, 1800VH 3600PF H |
| C445 | 76828473 | PLASTIC FILM, 200V 0.047UF J |
| C446 | 76073120 | ELECTROLYTIC, 250V 33UF |
| C448 | 76073118 | ELECTROLYTIC, 160V 33UF M |
| C449 | 76214221 | CERAMIC DISC, 500V B 220PF K |
| C450 | 76073057 | ELECTROLYTIC, 25V 1000UF M 3A |
| C460 | 76678220 | ELECTROLYTIC, 200V 22UF M |
| C463 | 76109682 | CERAMIC CHIP, 50V B 6800PF K |
| C464 | 76503149 | PLASTIC FILM, 250V 3.3UF |
| ⚠ C467 | 76820562 | PLASTIC FILM, 630V 5600PF J |
| ⚠ C468 | 76820682 | PLASTIC FILM, 630V 6800PF J |
| C473 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C481 | 76092784 | CERAMIC CHIP, 10V B 0.33UF K |
| C482 | 76109822 | CERAMIC CHIP, 50V B 8200PF K |
| C483 | 76105470 | CERAMIC CHIP, 50V CH 47PF J |
| C490 | 76073037 | ELECTROLYTIC, 16V 47UF M 3A |
| C491 | 76666100 | ELECTROLYTIC, 16V 10UF M 3A |
| C496 | 76503049 | PLASTIC FILM, 63V 0.47UF J |
| C497 | 76085022 | ELECTROLYTIC, NP, 16V 100UF M 3A |
| C499 | 76666220 | ELECTROLYTIC, 16V 22UF M 3A |
| C601 | 76109681 | CERAMIC CHIP, 50V B 680PF K |
| C602 | 76109681 | CERAMIC CHIP, 50V B 680PF K |
| C603 | 76073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C604 | 76073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C605 | 76073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C606 | 76073084 | ELECTROLYTIC, 50V 4.7UF M 3A |

| Location No. | Parts No. | Description |
|---|---|---|
| C607 | 76073053 | ELECTROLYTIC, 25V 100UF M 3A |
| C608 | 76073086 | ELECTROLYTIC, 50V 10UF M 3A |
| C612 | 76073039 | ELECTROLYTIC, 16V 220UF M 3A |
| C661 | 76073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C662 | 76073086 | ELECTROLYTIC, 50V 10UF M 3A |
| C663 | 76073086 | ELECTROLYTIC, 50V 10UF M 3A |
| C665 | 76109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C666 | 76073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C667 | 76794100 | ELECTROLYTIC, 16V 10UF M |
| C680 | 76073073 | ELECTROLYTIC, 35V 2200UF M 3A |
| C681 | 76109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C682 | 76073082 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C683 | 76795101 | ELECTROLYTIC, 25V 100UF M |
| C684 | 76795470 | ELECTROLYTIC, 25V 47UF M |
| C698 | 76085055 | ELECTROLYTIC NP 25V 222 25V 2200UF M |
| C699 | 76085055 | ELECTROLYTIC NP 25V 222 25V 2200UF M |
| ⚠ C801 | 76503004 | PLASTIC FILM, AC275V 0.47UF M |
| C805 | 76092281 | CERAMIC DISC, AC250V E 4700PF |
| C809 | 76086067 | ELECTROLYTIC 200V 102M LGQ2D102MESHTL |
| C810 | 76086067 | ELECTROLYTIC 200V 102M LGQ2D102MESHTL |
| ⚠ C811 | 76092595 | CERAMIC DISC, AC250V E 2200PF M |
| ⚠ C812 | 76092595 | CERAMIC DISC, AC250V E 2200PF M |
| ⚠ C814 | 76092579 | CERAMIC DISC, AC250V B 470PF K |
| C840 | 76679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C841 | 76073097 | ELECTROLYTIC, 10V 2200UF M 3A |
| C842 | 76503041 | PLASTIC FILM , 63V 0.1UF J |
| C843 | 76092333 | CERAMIC DISC, 2KV 100PF K |
| C845 | 76669229 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C849 | 76073038 | ELECTROLYTIC, 16V 100UF M 3A |
| C850 | 76073187 | ELECTROLYTIC, 35V 560UF M 3A |
| C851 | 76073187 | ELECTROLYTIC, 35V 560UF M 3A |
| C852 | 76073169 | ELECTROLYTIC, 25V 470UF M 3A |
| C853 | 76073169 | ELECTROLYTIC, 25V 470UF M 3A |
| C854 | 76667470 | ELECTROLYTIC, 25V 47UF M 3A |
| C860 | 76214103 | CERAMIC DISC, 500V B 0.01UF K |
| C862 | 76092341 | CERAMIC DISC, 2KV R 470PF K |
| C863 | 76503045 | PLASTIC FILM, 63V 0.22UF J |
| C866 | 76503053 | PLASTIC FILM, 63V 1UF J |
| C867 | 76591472 | PLASTIC FILM, 50V 4700PF J |
| C868 | 76669470 | ELECTROLYTIC, 50V 47UF M 3A |
| C869 | 76678229 | ELECTROLYTIC, 200V 2.2UF M 3A |
| C870 | 76503565 | PLASTIC FILM, 800V 0.1UF H |
| C871 | 76092343 | CERAMIC DISC, 2KV 680PF K |
| C873 | 76503045 | PLASTIC FILM, 63V 0.22UF J |
| C874 | 76092337 | CERAMIC DISC, 2KV 220PF K |
| C876 | 76503049 | PLASTIC FILM, 63V 0.47UF J |
| C877 | 76092344 | CERAMIC DISC, 2KV 820PF K |
| C879 | 76214102 | CERAMIC DISC, 500V B 1000PF K |
| C880 | 76092339 | CERAMIC DISC, 2KV 330PF K |
| C881 | 76092339 | CERAMIC DISC, 2KV 330PF K |
| C884 | 76086916 | ELECTROLYTIC, 160V 330UF M 3D |
| C885 | 76668102 | ELECTROLYTIC, 35V 1000UF M 3A |
| C888 | 76503045 | PLASTIC FILM, 63V 0.22UF J |
| C891 | 76073155 | ELECTROLYTIC, 16V 1000UF M 3A |
| C892 | 76073155 | ELECTROLYTIC, 16V 1000UF M 3A |
| C893 | 76073141 | ELECTROLYTIC, 10V 1000UF M 3A |
| C898 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C901 | 76211102 | CERAMIC DISC, 2KV B 1000PF K |
| C902 | 76794101 | ELECTROLYTIC, 16V 100UF M |
| C903 | 76232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C904 | 76109471 | CERAMIC CHIP, 50V B 470PF K |
| C906 | 76679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C907 | 76214101 | CERAMIC DISC, 500V B 100PF K |
| C911 | 76211102 | CERAMIC DISC, 2KV B 1000PF K |
| C912 | 76794101 | ELECTROLYTIC, 16V 100UF M |
| C913 | 76232103 | CERAMIC DISC, 50V F 0.01UF Z |

| Location No. | Parts No. | Description |
|---|---|---|
| C914 | 76109471 | CERAMIC CHIP, 50V B 470PF K |
| C915 | 76679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C917 | 76214101 | CERAMIC DISC, 500V B 100PF K |
| C921 | 76211102 | CERAMIC DISC, 2KV B 1000PF K |
| C922 | 76794101 | ELECTROLYTIC, 16V 100UF M |
| C923 | 76109471 | CERAMIC CHIP, 50V B 470PF K |
| C924 | 76232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C925 | 76679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C926 | 76214101 | CERAMIC DISC, 500V B 100PF K |
| C934 | 76092731 | CERAMIC CHIP, 16V B 1UF K |
| C944 | 76092542 | CERAMIC CHIP, 16V B 1UF K |
| C954 | 76092731 | CERAMIC CHIP, 16V B 1UF K |
| C961 | 76763101 | ELECTROLYTIC, 16V 100UF M |
| C962 | 76203100 | ELECTORLYTIC, 16V 10UF M 7L 3A |
| C4430 | 76073034 | ELECTROLYTIC, 16V 10UF M 3A |
| C7101 | 76797470 | ELECTROLYTIC, 50V 47UF M |
| C7102 | 76109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C7103 | 76206479 | ELECTROLYTIC, 50V 4.7UF M 7L 3A |
| C7104 | 76108330 | CERAMIC CHIP, 50V SL 33PF J |
| C7105 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7106 | 76797470 | ELECTROLYTIC, 50V 47UF M |
| C7107 | 76790470 | ELECTROLYTIC, 160V 47UF M |
| C7108 | 76214472 | CERAMIC DISC, 500V B 4700PF K |
| C7109 | 76214472 | CERAMIC DISC, 500V B 4700PF K |
| C7110 | 76666470 | ELECTORLYTIC, 16V 47UF M 3A |
| C7111 | 76666470 | ELECTORLYTIC, 16V 47UF M 3A |
| C7112 | 76435560 | CERAMIC DISC, 500V SL 56PF J |
| C7113 | 76790100 | ELECTROLYTIC, 160V 10UF M |
| C7114 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7701 | 76503047 | PLASTIC FILM, 63V 0.33UF J |
| C7704 | 76073053 | ELECTROLYTIC, 25V 100UF M 3A |
| C7705 | 76073037 | ELECTROLYTIC, 16V 47UF M 3A |
| C7706 | 76503047 | PLASTIC FILM, 63V 0.33UF J |
| C7722 | 76105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7724 | 76073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7725 | 76073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7727 | 76105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7730 | 76105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7733 | 76105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7735 | 76073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7736 | 76073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7738 | 76105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7741 | 76105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7750 | 76073015 | ELECTROLYTIC, 10V 47UF M 3A |
| C7751 | 76073089 | ELECTROLYTIC, 50V 47UF M 3A |
| C7752 | 76073089 | ELECTROLYTIC, 50V 47UF M 3A |
| C7753 | 76073093 | ELECTROLYTIC, 50V 470UF M 3A |
| C7761 | 76073015 | ELECTROLYTIC, 10V 47UF M 3A |
| C7762 | 76073015 | ELECTROLYTIC, 10V 47UF M 3A |
| C7765 | 76667220 | ELECTROLYTIC, 25V 22UF M 3A |
| C7784 | 76667220 | ELECTROLYTIC, 25V 22UF M 3A |
| C7785 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7786 | 76092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7800 | 76666220 | ELECTROLYTIC, 16V 22UF M 3A |
| CB01 | 76794470 | ELECTROLYTIC, 16V 47UF M |
| CV14 | 76212102 | CERAMIC DISC, 50V B 1000PF K |
| CV27 | 76762471 | ELECTROLYTIC, 10V 470UF M |
| CV29 | 76763101 | ELECTROLYTIC, 16V 100UF M |
| CV30 | 76232103 | CERAMIC DISC, 50V F 0.01UF Z |
| CV38 | 76212102 | CERAMIC DISC, 50V B 1000PF K |
| CV39 | 76212102 | CERAMIC DISC, 50V B 1000PF K |
| CY102 | 76665221 | ELECTROLYTIC, 10V 220UF M 3A |
| CY105 | 76100102 | CERAMIC CHIP, 50V F 1000PF Z |
| CY160 | 76815393 | CERAMIC CHIP, 50V B 0.039UF K |

| Location No. | Parts No. | Description |
|---|---|---|
| **RESISTORS** | | |
| R101 | 76382223 | OXIDE METAL FILM, 1W 22K OHM J |
| R150 | 76011332 | CHIP, 1/20W 3.3K OHM J |
| R151 | 76011562 | CHIP, 1/20W 5.6K OHM J |
| R152 | 76011103 | CHIP, 1/20W 10K OHM J |
| R173 | 76011103 | CHIP, 1/20W 10K OHM J |
| R174 | 76011273 | CHIP, 1/20W 27K OHM J |
| R240 | 76367153 | CARBON FILM, 1/6W 15K OHM G |
| R241 | 76367183 | CARBON FILM, 1/6W 18K OHM G |
| R242 | 76367183 | CARBON FILM, 1/6W 18K OHM G |
| R243 | 76367273 | CARBON FILM, 1/6W 27K OHM G |
| R244 | 76366124 | CARBON FILM, 1/6W 120K OHM J |
| R245 | 76366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R246 | 76366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R247 | 76366102 | CARBON FILM, 1/6W 1K OHM J |
| R249 | 76366104 | CARBON FILM, 1/6W 100K OHM J |
| R264 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| R265 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| R266 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| R286 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| R287 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| R288 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| R302 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| R305 | 76322109 | OXIDE METAL FILM, 1W 1 OHM J |
| R306 | 76011822 | CHIP, 1/20W 8.2K OHM J |
| R307 | 76011101 | CHIP, 1/20W 100 OHM J |
| R308 | 76011101 | CHIP, 1/20W 100 OHM J |
| R311 | 76366563 | CARBON FILM, 1/6W 56K OHM J |
| R312 | 76011123 | CHIP, 1/20W 12K OHM J |
| R313 | 76011102 | CHIP, 1/20W 1K OHM J |
| R314 | 76011473 | CHIP, 1/20W 47K OHM J |
| R315 | 76011681 | CHIP, 1/20W 680 OHM J |
| R321 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R322 | 76011101 | CHIP, 1/20W 100 OHM J |
| R325 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R330 | 76000633 | METAL FILM, 1/4W 10K OHM F |
| R331 | 76000633 | METAL FILM, 1/4W 10K OHM F |
| R334 | 76011102 | CHIP, 1/20W 1K OHM J |
| R335 | 76011102 | CHIP, 1/20W 1K OHM J |
| R336 | 76011102 | CHIP, 1/20W 1K OHM J |
| R337 | 76321129 | OXIDE METAL FILM, 1/2W 1.2 OHM J |
| R338 | 76011153 | CHIP, 1/2OW 15K OHM J |
| R340 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R341 | 76011183 | CHIP, 1/20W 18K OHM J |
| R343 | 76011102 | CHIP, 1/20W 1K OHM J |
| R344 | 76382151 | OXIDE METAL FILM, 1W 150 OHM J |
| R345 | 76000445 | CHIP JUMPER, 1608TYPE |
| R346 | 76382391 | OXIDE METAL FILM, 1W 390 OHM J |
| R348 | 76011473 | CHIP, 1/20W 47K OHM J |
| R349 | 76011392 | CHIP, 1/20W 3.9K OHM J |
| R350 | 76011123 | CHIP, 1/20W 12K OHM J |
| R355 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R360 | 76011562 | CHIP, 1/20W 5.6K OHM J |
| R361 | 76011104 | CHIP, 1/20W 100K OHM J |
| R362 | 76011473 | CHIP, 1/20W 47K OHM J |
| R363 | 76011103 | CHIP, 1/20W 10K OHM J |
| R364 | 76011331 | CHIP, 1/20W 330 OHM J |
| R365 | 76011682 | CHIP, 1/20W 6.8K OHM J |
| R366 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R367 | 76011392 | CHIP, 1/20W 3.9K OHM J |
| R369 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R370 | 76366102 | CARBON FILM, 1/6W 1K OHM J |
| R371 | 76011823 | CHIP, 1/20W 82K OHM J |
| R372 | 76011332 | CHIP, 1/20W 3.3K OHM J |
| R373 | 76011823 | CHIP, 1/20W 82K OHM J |
| R374 | 76011104 | CHIP, 1/20W 100K OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R375 | 76011153 | CHIP, 1/2OW 15K OHM J |
| R376 | 76011333 | CHIP, 1/20W 33K OHM J |
| R378 | 76011103 | CHIP, 1/20W 10K OHM J |
| R390 | 76382561 | OXIDE METAL FILM, 1W 560 OHM J |
| R391 | 76382561 | OXIDE METAL FILM, 1W 560 OHM J |
| R392 | 76382561 | OXIDE METAL FILM, 1W 560 OHM J |
| R403 | 76553101 | OXIDE METAL FILM, 1W 100 OHM J |
| R404 | 76011182 | CHIP, 1/20W 1.8K OHM J |
| R405 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| R406 | 76382682 | OXIDE METAL FILM, 1W 6.8K OHM J |
| R407 | 76381100 | OXIDE METAL FILM, 1/2W 10 OHM J |
| R409 | 76555220 | OXIDE METAL FILM, 3W 22 OHM J |
| R410 | 76555220 | OXIDE METAL FILM, 3W 22 OHM J |
| R411 | 76323229 | OXIDE METAL FILM, 2W 2.2 OHM J |
| R412 | 76383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R413 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| R414 | 76019259 | FUSIBLE, 1/4W 27 OHM G |
| R415 | 76011102 | CHIP, 1/20W 1K OHM J |
| R416 | 76383151 | OXIDE METAL FILM, 2W 150 OHM J |
| R417 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R418 | 76011103 | CHIP, 1/20W 10K OHM J |
| R419 | 76011103 | CHIP, 1/20W 10K OHM J |
| R420 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R421 | 76366223 | CARBON FILM, 1/6W 22K OHM J |
| R422 | 76011223 | CHIP, 1/20W 22K OHM J |
| R423 | 76942102 | CARBON COMPOSITION, 1/2W 1K OHM J |
| R424 | 76376104 | CARBON FILM, 1/2W 100K OHM J |
| R425 | 76376104 | CARBON FILM, 1/2W 100K OHM J |
| R426 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| R427 | 76011101 | CHIP, 1/20W 100 OHM J |
| R428 | 76377224 | CARBON FILM, 1W 220K OHM J |
| R429 | 76942102 | CARBON COMPOSITION, 1/2W 1K OHM J |
| R431 | 76383102 | OXIDE METAL FILM, 2W 1K OHM J |
| R432 | 76376274 | CARBON FILM, 1/2W 270K OHM J |
| R433 | 76376274 | CARBON FILM, 1/2W 270K OHM J |
| R434 | 76376274 | CARBON FILM, 1/2W 270K OHM J |
| R435 | 76366332 | CARBON FILM, 1/6W 3.3K OHM J |
| R436 | 76366473 | CARBON FILM, 1/6W 47K OHM J |
| R437 | 76011223 | CHIP, 1/20W 22K OHM J |
| R438 | 76011102 | CHIP, 1/20W 1K OHM J |
| R439 | 76011103 | CHIP, 1/20W 10K OHM J |
| R440 | 76011103 | CHIP, 1/20W 10K OHM J |
| R441 | 76533331 | FUSIBLE, 2W 330 OHM J |
| R443 | 76310109 | OXIDE METAL FILM, 1/2W 1 OHM J |
| R444 | 76322398 | OXIDE METAL FILM, 1W 0.39 OHM J |
| R446 | 76011103 | CHIP, 1/20W 10K OHM J |
| R447 | 76382473 | OXIDE METAL FILM, 1W 47K OHM J |
| R448 | 76366562 | CARBON FILM, 1/6W 5.6K OHM J |
| R449 | 76366152 | CARBON FILM, 1/6W 1.5K OHM J |
| R466 | 76366433 | CARBON FILM, 1/6W 43K OHM J |
| R467 | 76011221 | CHIP, 1/20W 220 OHM J |
| R469 | 76011101 | CHIP, 1/20W 100 OHM J |
| R470 | 76322478 | OXIDE METAL FILM, 1W 0.47 OHM J |
| R471 | 76366224 | CARBON FILM, 1/6W 220K OHM J |
| R472 | 76011101 | CHIP, 1/20W 100 OHM J |
| R473 | 76011223 | CHIP, 1/20W 22K OHM J |
| R474 | 76376393 | CARBON FILM, 1/2W 39K OHM J |
| R475 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| R476 | 76011471 | CHIP, 1/20W 470 OHM J |
| ⚠ R477 | 76998331 | CHIP, 1/16W 330 OHM D |
| R478 | 76011102 | CHIP, 1/20W 1K OHM J |
| R480 | 76011473 | CHIP, 1/20W 47K OHM J |
| R481 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R482 | 76011103 | CHIP, 1/20W 10K OHM J |
| R483 | 76000445 | CHIP JUMPER, 1608TYPE |
| R485 | 76011681 | CHIP, 1/20W 680 OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R486 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R487 | 76552271 | OXIDE METAL FILM, 1/2W 270 OHM J |
| R488 | 76552151 | OXIDE METAL FILM, 1/2W 150 OHM J |
| R489 | 76011102 | CHIP, 1/20W 1K OHM J |
| R490 | 76552331 | OXIDE METAL FILM, 1/2W 330 OHM J |
| R491 | 76011222 | CHIP, 1/20W 2.2K OHM J |
| ⚠ R492 | 76998102 | CHIP, 1/16W 1K OHM |
| ⚠ R493 | 76998391 | CHIP, 1/16W 390 OHM |
| ⚠ R494 | 76998471 | CHIP, 1/16W 470 OHM |
| R495 | 76011333 | CHIP, 1/20W 33K OHM J |
| R496 | 76011103 | CHIP, 1/20W 10K OHM J |
| R497 | 76011100 | CHIP, 1/20W 10 OHM J |
| R498 | 76011103 | CHIP, 1/20W 10K OHM J |
| R499 | 76011102 | CHIP, 1/20W 1K OHM J |
| R513 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| R515 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R601 | 76011822 | CHIP, 1/20W 8.2K OHM J |
| R602 | 76011822 | CHIP, 1/20W 8.2K OHM J |
| R603 | 76011102 | CHIP, 1/20W 1K OHM J |
| R604 | 76011102 | CHIP, 1/20W 1K OHM J |
| R609 | 76011563 | CHIP, 1/20W 56K OHM J |
| R610 | 76011273 | CHIP, 1/20W 27K OHM J |
| R611 | 76011103 | CHIP, 1/20W 10K OHM J |
| R612 | 76011222 | CHIP, 1/20W 2.2K OHM J |
| R613 | 76011223 | CHIP, 1/20W 22K OHM J |
| R614 | 76011103 | CHIP, 1/20W 10K OHM J |
| R615 | 76011104 | CHIP, 1/20W 100K OHM J |
| R616 | 76011822 | CHIP, 1/20W 8.2K OHM J |
| R626 | 76011223 | CHIP, 1/20W 22K OHM J |
| R627 | 76011223 | CHIP, 1/20W 22K OHM J |
| R661 | 76011102 | CHIP, 1/20W 1K OHM J |
| R662 | 76011333 | CHIP, 1/20W 33K OHM J |
| R663 | 76011822 | CHIP, 1/20W 8.2K OHM J |
| R665 | 76011223 | CHIP, 1/20W 22K OHM J |
| R666 | 76011473 | CHIP, 1/20W 47K OHM J |
| R667 | 76011223 | CHIP, 1/20W 22K OHM J |
| R668 | 76011473 | CHIP, 1/20W 47K OHM J |
| R671 | 76011102 | CHIP, 1/20W 1K OHM J |
| R672 | 76011333 | CHIP, 1/20W 33K OHM J |
| R673 | 76011822 | CHIP, 1/20W 8.2K OHM J |
| R674 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R676 | 76011104 | CHIP, 1/20W 100K OHM J |
| R677 | 76011104 | CHIP, 1/20W 100K OHM J |
| R681 | 76011222 | CHIP, 1/20W 2.2K OHM J |
| R682 | 76011473 | CHIP, 1/20W 47K OHM J |
| R683 | 76011223 | CHIP, 1/20W 22K OHM J |
| R684 | 76011223 | CHIP, 1/20W 22K OHM J |
| R687 | 76011103 | CHIP, 1/20W 10K OHM J |
| R688 | 76011224 | CHIP, 1/20W 220K OHM J |
| R693 | 76000445 | CHIP JUMPER, 1608TYPE |
| R697 | 76553221 | OXIDE METAL FILM, 1W 220 OHM J |
| R698 | 76011103 | CHIP, 1/20W 10K OHM J |
| R699 | 76011103 | CHIP, 1/20W 10K OHM J |
| R810 | 76120001 | CEMENT RES 141C 2.1W 1R8 K |
| R818 | 76011471 | CHIP, 1/20W 470 OHM J |
| R819 | 76011103 | CHIP, 1/20W 10K OHM J |
| R840 | 76552562 | OXIDE METAL FILM, 1/2W 5.6K OHM J |
| R841 | 76011102 | CHIP, 1/20W 1K OHM J |
| R842 | 76376563 | CARB0N FILM, 1/2W 56K OHM J |
| R843 | 76376563 | CARB0N FILM, 1/2W 56K OHM J |
| R844 | 76011103 | CHIP, 1/20W 10K OHM J |
| R845 | 76366102 | CARBON FILM, 1/6W 1K OHM J |
| R849 | 76011101 | CHIP, 1/20W 100 OHM J |
| R854 | 76381150 | OXIDE METAL FILM, 1/2W 15 OHM J |
| R860 | 76383473 | OXIDE METAL FILM, 2W 47K OHM J |
| R862 | 76321689 | OXIDE METAL FILM, 1/2W 6.8 OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R864 | 76552102 | OXIDE METAL FILM, 1/2W 1K OHM J |
| R865 | 76552390 | OXIDE METAL FILM, 1/2W 39 OHM J |
| R866 | 76366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R867 | 76366223 | CARBON FILM, 1/6W 22K OHM J |
| R868 | 76552470 | OXIDE METAL FILM, 1/2W 47 OHM J |
| R870 | 76381151 | OXIDE METAL FILM, 1/2W 150 OHM J |
| R871 | 76382680 | OXIDE METAL FILM, 1W 68 OHM J |
| R873 | 76552100 | OXIDE METAL FILM, 1/2W 10 OHM J |
| R874 | 76366150 | CARBON FILM, 1/6W 15 OHM J |
| R881 | 76011102 | CHIP, 1/20W 1K OHM J |
| R883 | 76381102 | OXIDE METAL FILM, 1/2W 1K OHM J |
| R885 | 76366471 | CARBON FILM, 1/6W 470 OHM J |
| R893 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R894 | 76011103 | CHIP, 1/20W 10K OHM J |
| ⚠ R899 | 76010001 | CARBON FILM, 1/2W 3.9M OHM J |
| R900 | 76000892 | FUSIBLE, 1W 1.2 OHM J |
| R901 | 76366331 | CARBON FILM, 1/6W 330 OHM J |
| R903 | 76552101 | OXIDE METAL FILM, 1/2W 100 OHM J |
| R905 | 76872180 | CHIP, 1/16W 18 OHM J |
| R906 | 76872271 | CHIP, 1/16W 270 OHM J |
| R908 | 76872560 | CHIP, 1/16W 56 OHM J |
| R909 | 76872270 | CHIP, 1/16W 27 OHM J |
| R910 | 76322568 | OXIDE METAL FILM, 1W 0.56 OHM J |
| R911 | 76366331 | CARBON FILM, 1/6W 330 OHM J |
| R913 | 76552101 | OXIDE METAL FILM, 1/2W 100 OHM J |
| R915 | 76872270 | CHIP, 1/16W 27 OHM J |
| R916 | 76872271 | CHIP, 1/16W 270 OHM J |
| R918 | 76872560 | CHIP, 1/16W 56 OHM J |
| R919 | 76872180 | CHIP, 1/16W 18 OHM J |
| R920 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R921 | 76366331 | CARBON FILM, 1/6W 330 OHM J |
| R923 | 76552101 | OXIDE METAL FILM, 1/2W 100 OHM J |
| R925 | 76872330 | CHIP, 1/16W 33 OHM J |
| R926 | 76872271 | CHIP, 1/16W 270 OHM J |
| R928 | 76872680 | CHIP, 1/16W 68 OHM J |
| R929 | 76872180 | CHIP, 1/16W 18 OHM J |
| R930 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R931 | 76568272 | CERAMIC COVERED, 7W 2.7K OHM J |
| R938 | 76366150 | CARBON FILM, 1/6W 15 OHM J |
| R944 | 76568272 | CERAMIC COVERED, 7W 2.7K OHM J |
| R945 | 76366150 | CARBON FILM, 1/6W 15 OHM J |
| R948 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R950 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R951 | 76568272 | CERAMIC COVERED, 7W 2.7K OHM J |
| R958 | 76366150 | CARBON FILM, 1/6W 15 OHM J |
| R961 | 76872182 | CHIP, 1/16W 1.8K OHM J |
| R962 | 76872182 | CHIP, 1/16W 1.8K OHM J |
| R963 | 76872100 | CHIP, 1/16W 10 OHM J |
| R964 | 76872332 | CHIP, 1/16W 3.3K OHM J |
| R965 | 76872101 | CHIP, 1/16W 100 OHM J |
| R966 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R967 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R968 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R969 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R970 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R971 | 76872152 | CHIP, 1/16W 1.5K OHM J |
| R978 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R987 | 76872101 | CHIP, 1/16W 100 OHM J |
| R988 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R991 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R992 | 76366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R4430 | 76381150 | OXIDE METAL FILM, 1/2W 15 OHM J |
| R4431 | 76366102 | CARBON FILM, 1/6W 1K OHM J |
| R7102 | 76872681 | CHIP, 1/16W 680 OHM J |
| R7103 | 76872102 | CHIP, 1/16W 1K OHM J |
| R7104 | 76872102 | CHIP, 1/16W 1K OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R7105 | 76871221 | CHIP, 1/8W 220 OHM J |
| R7106 | 76871221 | CHIP, 1/8W 220 OHM J |
| R7107 | 76872101 | CHIP, 1/16W 100 OHM J |
| R7108 | 76872332 | CHIP, 1/16W 3.3K OHM J |
| R7109 | 76872333 | CHIP, 1/16W 33K OHM J |
| R7110 | 76872273 | CHIP, 1/16W 27K OHM J |
| R7111 | 76872333 | CHIP, 1/16W 33K OHM J |
| R7112 | 76872151 | CHIP, 1/16W 150 OHM J |
| R7113 | 76872751 | CHIP, 1/16W 750 OHM J |
| R7114 | 76872681 | CHIP, 1/16W 680 OHM J |
| R7115 | 76871471 | CHIP, 1/8W 470 OHM J |
| R7116 | 76871471 | CHIP, 1/8W 470 OHM J |
| R7117 | 76872101 | CHIP, 1/16W 100 OHM J |
| R7118 | 76872101 | CHIP, 1/16W 100 OHM J |
| R7119 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7120 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7121 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7122 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7123 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7124 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7125 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7126 | 76871100 | CHIP, 1/8W 10 OHM J |
| R7127 | 76552331 | OXIDE METAL FILM, 1/2W 330 OHM J |
| R7128 | 76872751 | CHIP, 1/16W 750 OHM J |
| R7129 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R7130 | 76872683 | CHIP, 1/16W 68K OHM J |
| R7131 | 76872683 | CHIP, 1/16W 68K OHM J |
| R7132 | 76872751 | CHIP, 1/16W 750 OHM J |
| R7133 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R7134 | 76872102 | CHIP, 1/16W 1K OHM J |
| R7135 | 76553100 | OXIDE METAL FILM, 1W 10 OHM J |
| R7136 | 76321229 | OXIDE METAL FILM, 1/2W 2.2 OHM J |
| R7137 | 76553100 | OXIDE METAL FILM, 1W 10 OHM J |
| R7138 | 76322229 | OXIDE METAL FILM, 1W 2.2 OHM J |
| R7139 | 76554221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7140 | 76872220 | CHIP, 1/16W 22 OHM J |
| R7141 | 76872220 | CHIP, 1/16W 22 OHM J |
| R7701 | 76011392 | CHIP, 1/20W 3.9K OHM J |
| R7702 | 76000445 | CHIP JUMPER, 1608TYPE |
| R7707 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7708 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7710 | 76383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7711 | 76339189 | OXIDE METAL FILM, 2W 1.8 OHM J |
| R7712 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7713 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7715 | 76383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7716 | 76339189 | OXIDE METAL FILM, 2W 1.8 OHM J |
| R7717 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7718 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7720 | 76383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7721 | 76339189 | OXIDE METAL FILM, 2W 1.8 OHM J |
| R7722 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7723 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7725 | 76383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7726 | 76339189 | OXIDE METAL FILM, 2W 1.8 OHM J |
| R7727 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7728 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7730 | 76383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7731 | 76339189 | OXIDE METAL FILM, 2W 1.8 OHM J |
| R7732 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7733 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7735 | 76383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7736 | 76339189 | OXIDE METAL FILM, 2W 1.8 OHM J |
| R7743 | 76322338 | OXIDE METAL FILM, 1W 0.33 OHM J |
| R7744 | 76322338 | OXIDE METAL FILM, 1W 0.33 OHM J |
| R7745 | 76011101 | CHIP, 1/20W 100 OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R7746 | 76011101 | CHIP, 1/20W 100 OHM J |
| R7747 | 76011221 | CHIP, 1/20W 220 OHM J |
| R7748 | 76011221 | CHIP, 1/20W 220 OHM J |
| R7749 | 76011102 | CHIP, 1/20W 1K OHM J |
| R7750 | 76011332 | CHIP, 1/20W 3.3K OHM J |
| R7751 | 76011153 | CHIP, 1/2OW 15K OHM J |
| R7752 | 76011822 | CHIP, 1/20W 8.2K OHM J |
| R7753 | 76011101 | CHIP, 1/20W 100 OHM J |
| R7754 | 76011333 | CHIP, 1/20W 33K OHM J |
| R7755 | 76011153 | CHIP, 1/2OW 15K OHM J |
| R7756 | 76011153 | CHIP, 1/2OW 15K OHM J |
| R7757 | 76011681 | CHIP, 1/20W 680 OHM J |
| R7758 | 76011332 | CHIP, 1/20W 3.3K OHM J |
| R7760 | 76011682 | CHIP, 1/20W 6.8K OHM J |
| R7761 | 76011123 | CHIP, 1/20W 12K OHM J |
| R7762 | 76011682 | CHIP, 1/20W 6.8K OHM J |
| R7763 | 76011123 | CHIP, 1/20W 12K OHM J |
| R7765 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7766 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R7767 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7768 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7769 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7770 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7771 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7772 | 76011473 | CHIP, 1/20W 47K OHM J |
| R7773 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7774 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7801 | 76383471 | OXIDE METAL FILM, 2W 470 OHM J |
| R7802 | 76383681 | OXIDE METAL FILM, 2W 680 OHM J |
| R7880 | 76011221 | CHIP, 1/20W 220 OHM J |
| R7881 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7882 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7883 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7884 | 76011103 | CHIP, 1/20W 10K OHM J |
| R7885 | 76366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R7886 | 76011104 | CHIP, 1/20W 100K OHM J |
| R7887 | 76366103 | CARBON FILM, 1/6W 10K OHM J |
| R7890 | 76011331 | CHIP, 1/20W 330 OHM J |
| R7891 | 76011331 | CHIP, 1/20W 330 OHM J |
| R7892 | 76366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R7893 | 76011472 | CHIP, 1/20W 4.7K OHM J |
| R7910 | 76011221 | CHIP, 1/20W 220 OHM J |
| R7911 | 76011221 | CHIP, 1/20W 220 OHM J |
| R7912 | 76011101 | CHIP, 1/20W 100 OHM J |
| R7913 | 76011101 | CHIP, 1/20W 100 OHM J |
| R7931 | 76000445 | CHIP JUMPER, 1608TYPE |
| R9501 | 76872101 | CHIP, 1/16W 100 OHM J |
| R9503 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R9504 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R9607 | 76872101 | CHIP, 1/16W 100 OHM J |
| R9608 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| R9609 | 76872122 | CHIP, 1/16W 1.2K OHM J |
| RA71 | 76366273 | CARBON FILM, 1/6W 27K OHM J |
| RA72 | 76366153 | CARBON FILM, 1/6W 15K OHM J |
| RA73 | 76366822 | CARBON FILM, 1/6W 8.2K OHM J |
| RA76 | 76366822 | CARBON FILM, 1/6W 8.2K OHM J |
| RA77 | 76366153 | CARBON FILM, 1/6W 15K OHM J |
| RA78 | 76366273 | CARBON FILM, 1/6W 27K OHM J |
| RA79 | 76366823 | CARBON FILM, 1/6W 82K OHM J |
| RB01 | 76366391 | CARBON FILM, 1/6W 390 OHM J |
| RB04 | 76366473 | CARBON FILM, 1/6W 47K OHM J |
| RB05 | 76366102 | CARBON FILM, 1/6W 1K OHM J |
| RB15 | 76366471 | CARBON FILM, 1/6W 470 OHM J |
| RB19 | 76366470 | CARBON FILM, 1/6W 47 OHM J |
| RV20 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV21 | 76366750 | CARBON FILM, 1/6W 75 OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| RV22 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV23 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| RV33 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV34 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV35 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV36 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV37 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV40 | 76366750 | CARBON FILM, 1/6W 75 OHM J |
| RV61 | 76366101 | CARBON FILM, 1/6W 100 OHM J |
| RV85 | 76366471 | CARBON FILM, 1/6W 470 OHM J |
| RV86 | 76366471 | CARBON FILM, 1/6W 470 OHM J |
| RV89 | 76366680 | CARBON FILM, 1/6W 68 OHM J |
| RY160 | 76011471 | CHIP, 1/20W 470 OHM J |
| **COIL & TRANSFORMERS** | | |
| L101 | 23289027 | COIL, PEAKING, TRF4680AT |
| L103 | 23289026 | COIL, PEAKING, TRF4470AT |
| L302 | 23248400 | COIL, CHOKE, TLN3299D |
| L303 | 23248400 | COIL, CHOKE, TLN3299D |
| L304 | 23103302 | FERRITE CHOKE, TEM2011AH |
| L305 | 23103307 | FERRITR CHOKE, TEM2014AA |
| L310 | 23289028 | COIL, PEAKING, TRF4101AT |
| L401 | 23289009 | COIL, PEAKING, TRF4560AF |
| ⚠ L402 | 23248455 | COIL, CHOKE, TLN3534AH |
| L403 | 23103302 | FERRITE CHOKE, TEM2011AH |
| L406 | 23248413 | COIL, CHOKE, TLN3351AD |
| L407 | 23103307 | FERRITR CHOKE, TEM2014AA |
| L408 | 23103307 | FERRITR CHOKE, TEM2014AA |
| ⚠ L441 | 23233136 | COIL, LINEARITY, TLN2222AH |
| ⚠ L462 | 23231431 | COIL, DEFLECTION YOKE, TDY707RD |
| ⚠ L463 | 23231431 | COIL, DEFLECTION YOKE, TDY707RD |
| ⚠ L464 | 23231431 | COIL, DEFLECTION YOKE, TDY707RD |
| L472 | 23102564 | COIL, CPM29.1VM6T, MAG-1136 |
| L473 | 23102564 | COIL, CPM29.1VM6T, MAG-1136 |
| L474 | 23102564 | COIL, CPM29.1VM6T, MAG-1136 |
| L490 | 23289981 | COIL, PEAKING, TRF4330AZ |
| L840 | 23289025 | COIL, PEAKING, TRF4330AT |
| L841 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L850 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L851 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L852 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L854 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L861 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L862 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L864 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L880 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L881 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L885 | 23248400 | COIL, CHOKE, TLN3299D |
| L886 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L887 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L888 | 23248446 | COIL, CHOKE, TLN3462AH |
| L891 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L892 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L893 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L894 | 23248432 | COIL, CHOKE, TLN3499AH |
| L895 | 23248432 | COIL, CHOKE, TLN3499AH |
| L896 | 23248432 | COIL, CHOKE, TLN3499AH |
| L902 | 23289993 | COIL, PEAKING, TRF41R5AF |
| L904 | 23289989 | COIL, PEAKING, TRF4120AF |
| L905 | 23289014 | COIL, PEAKING, TRF46R8AF |
| L911 | 23289996 | COIL, PEAKING, TRF4220AF |
| L913 | 23289993 | COIL, PEAKING, TRF41R5AF |
| L915 | 23289014 | COIL, PEAKING, TRF46R8AF |
| L916 | 23289989 | COIL, PEAKING, TRF4120AF |
| L923 | 23289993 | COIL, PEAKING, TRF41R5AF |
| L924 | 23289989 | COIL, PEAKING, TRF4120AF |

| Location No. | Parts No. | Description |
|---|---|---|
| L925 | 23289014 | COIL, PEAKING, TRF46R8AF |
| L7101 | 23289022 | COIL, PEAKING, TRF4100AT |
| L7102 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L7103 | 23103304 | FERRITE CHOKE, TEM2011AA |
| L7104 | 23103323 | FERRITE CORE, HC5-035 |
| L7710 | 23248400 | COIL, CHOKE, TLN3299D |
| L7711 | 23248400 | COIL, CHOKE, TLN3299D |
| LV13 | 23289985 | COIL, PEAKING, TRF4100AF |
| LV20 | 23221156 | COIL, PEAKING, TRF4560AJ |
| LV36 | 23289009 | COIL, PEAKING, TRF4560AF |
| LV37 | 23289009 | COIL, PEAKING, TRF4560AF |
| LY101 | 23248398 | COIL, CHOKE, TLN3278D |
| LY102 | 23221144 | COIL, PEAKING, TRF4229AJ |
| LY103 | 23221144 | COIL, PEAKING, TRF4229AJ |
| T400 | 23224401 | TRANSFORMER, FOCUS, TLN2220AH |
| T401 | 23224396 | TRANSFORMER, TLN1080AH |
| T461A | 23192972 | ANODE CAP ASSY, TCC5609AT |
| T461Z | 23236941 | TRANSFORMER, FLY-BACK TFB3094ZD |
| ⚠ T801 | 23211836 | COIL, LINE FILTER, TRF3197AH |
| ⚠ T840 | 23217790 | TRANSFORMER, CONVERTER TPW3425BH |
| ⚠ T862 | 23217669 | TRANSFORMER, CONVERTER TPW3549AS |
| T865 | 23224392 | TRANSFORMER, PULSE TLN2229AH |
| **SEMICONDUCTORS** | | |
| Q151 | 23205346 | TRANSISTOR, KTA2014Y/P |
| Q152 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q172 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q241 | 23205342 | TRANSISTOR, 2SC2482(F) |
| Q301 | 23085526 | IC, LA7833-S-E |
| Q302 | 23085309 | IC, TA1317ANG |
| Q305 | 23205346 | TRANSISTOR, KTA2014Y/P |
| Q306 | 23085872 | IC, OPE-AMP 14PIN DIP TA75902PG(5,J) |
| Q370 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q371 | 23205346 | TRANSISTOR, KTA2014Y/P |
| Q372 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q400 | 23205370 | TRANSISTOR, 2SC4686A(Q) |
| Q402 | 23205416 | TRANSISTOR, FET, 2SK2962(F) |
| Q404 | 23205405 | TRANSISTOR, 2SC5859(FA,Q) |
| Q405 | 23205346 | TRANSISTOR, KTA2014Y/P |
| Q406 | 23205347 | TRANSISTOR, KTC4075Y/P |
| ⚠ Q408 | 23205346 | TRANSISTOR, KTA2014Y/P |
| Q409 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q410 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q411 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q420 | 23205342 | TRANSISTOR, 2SC2482(F) |
| Q425 | 23205350 | TRANSISTOR, FET, 2SK2920(Q) |
| Q428 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q470 | 23205516 | TRANSISTOR, 2SA1320(F) |
| Q471 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q472 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q473 | 23205346 | TRANSISTOR, KTA2014Y/P |
| Q601 | 23009603 | IC, AN7580 |
| Q612 | 23205346 | TRANSISTOR, KTA2014Y/P |
| Q613 | 23205347 | TRANSISTOR, KTC4075Y/P |
| Q614 | 23205327 | TRANSISTOR, RN1406(F) |
| Q661 | 23205424 | TRANSISTOR, KTC2875B/P |
| Q662 | 23205424 | TRANSISTOR, KTC2875B/P |
| Q663 | 23085575 | IC, OP AMP, BA4558 |
| Q664 | 23205325 | TRANSISTOR, RN2404(F) |
| Q681 | 23205424 | TRANSISTOR, KTC2875B/P |
| Q682 | 23205424 | TRANSISTOR, KTC2875B/P |
| Q711 | 23205269 | TRANSISTOR, VCBO-160V IC-1.5A 2SA2005 |
| Q712 | 23205270 | TRANSISTOR, VCBO 160V 1.5A 2SC5511 |
| Q751 | 23135074 | IC, STK394-250A |
| Q752 | 23135074 | IC, STK394-250A |
| Q765 | 23205347 | TRANSISTOR, KTC4075Y/P |

| Location No. | Parts No. | Description |
|---|---|---|
| Q766 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q767 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q768 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q769 | 23085560 | IC, TA75S393F(F) |
| Q782 | 23085531 | IC, NJM79M05FA |
| Q784 | 23085424 | IC, KIA7805API-U/P |
| Q785 | 23085596 | IC, PST994D |
| Q794 | 23085560 | IC, TA75S393F(F) |
| Q795 | 23085691 | IC, TC4066BP(N,F) |
| Q796 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q801 | 23135066 | IC, STRZ4479 |
| Q840 | 23085559 | IC, MIP280 |
| ⚠ Q841 | 23085431 | IC, PHOTO COUPLER, PS2581L1(D) |
| ⚠ Q842 | 23085431 | IC, PHOTO COUPLER, PS2581L1(D) |
| Q843 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q844 | 23205347 | TRANSISTOR,KTC4075Y/P |
| ⚠ Q862 | 23085431 | IC, PHOTO COUPLER, PS2581L1(D) |
| ⚠ Q881 | 23085524 | IC, SE116N, LF4 |
| Q894 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q901 | 23205412 | TRANSISTOR,2SC3942 |
| Q902 | 23205415 | TRANSISTOR,2SC3950E |
| Q911 | 23205412 | TRANSISTOR,2SC3942 |
| Q912 | 23205415 | TRANSISTOR,2SC3950E |
| Q913 | 23205357 | TRANSISTOR, KTA1504S Y/P |
| Q921 | 23205412 | TRANSISTOR,2SC3942 |
| Q922 | 23205415 | TRANSISTOR,2SC3950E |
| Q961 | 23205358 | TRANSISTOR, KTC3875S Y/P |
| Q962 | 23205357 | TRANSISTOR, KTA1504S Y/P |
| Q973 | 23205357 | TRANSISTOR, KTA1504S Y/P |
| Q4430 | 23205444 | TRANSISTOR,2SC2236-Y(F) |
| Q7101 | 23205358 | TRANSISTOR, KTC3875S Y/P |
| Q7102 | 23205358 | TRANSISTOR, KTC3875S Y/P |
| Q7103 | 23085635 | IC, 2SC3437-Y(TE85L,F) |
| Q7104 | 23205312 | TRANSISTOR,2SC1815-GR(F) |
| Q7105 | 23205358 | TRANSISTOR, KTC3875S Y/P |
| Q7106 | 23205358 | TRANSISTOR, KTC3875S Y/P |
| Q7107 | 23205357 | TRANSISTOR, KTA1504S Y/P |
| Q7108 | 23205358 | TRANSISTOR, KTC3875S Y/P |
| Q7109 | 23205357 | TRANSISTOR, KTA1504S Y/P |
| Q7761 | 23205346 | TRANSISTOR,KTA2014Y/P |
| Q7762 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q7763 | 23205347 | TRANSISTOR,KTC4075Y/P |
| Q7764 | 23205346 | TRANSISTOR,KTA2014Y/P |
| QB01 | 23205499 | TRANSISTOR, KTC3198 Y/P |
| QH301 | 23358614 | OPT DEVICE, PHOTOSENSOR, AM-30-24CA-E @E051Z - E054Z |
| QV48 | 23205499 | TRANSISTOR, KTC3198 Y/P |
| QY160 | 23205347 | TRANSISTOR,KTC4075Y/P |
| D101 | 23357901 | DIODE, ZENER, MTZJ33C |
| D301 | 23357755 | DIODE, ZENER, MA8075-H |
| D302 | 23357366 | DIODE, FR105-B5 |
| D303 | 23357872 | DIODE, ZENER, MTZJ15C |
| D304 | 23357917 | DIODE, SC570A |
| D305 | 23357365 | DIODE, 1N4004A-B5 |
| D306 | 23357365 | DIODE, 1N4004A-B5 |
| D327 | 23357861 | DIODE, ZENER, MTZJ11A |
| D333 | 23357861 | DIODE, ZENER, MTZJ11A |
| D334 | 23357861 | DIODE, ZENER, MTZJ11A |
| D336 | 23357745 | DIODE, ZENER, MA8056-M |
| D337 | 23357745 | DIODE, ZENER, MA8056-M |
| D365 | 23357755 | DIODE, ZENER, MA8075-H |
| D370 | 23357703 | DIODE, 1SS355 |
| D401 | 23357510 | DIODE, AG01 |
| D402 | 23357366 | DIODE, FR105-B5 |
| D404 | 23357705 | DIODE, ERC06-15 |
| D406 | 23357366 | DIODE, FR105-B5 |
| D411 | 23357784 | DIODE, ZENER, MA8180-M |

| Location No. | Parts No. | Description |
|---|---|---|
| D412 | 23357694 | DIODE, RP1H |
| D413 | 23357694 | DIODE, RP1H |
| D414 | 23357366 | DIODE, FR105-B5 |
| D415 | 23357366 | DIODE, FR105-B5 |
| D418 | 23357901 | DIODE, ZENER, MTZJ33C |
| D419 | 23357703 | DIODE, 1SS355 |
| D420 | 23357697 | DIODE, 1SS133 |
| D421 | 23357366 | DIODE, FR105-B5 |
| D425 | 23357366 | DIODE, FR105-B5 |
| D426 | 23357784 | DIODE, ZENER, MA8180-M |
| D450 | 23357365 | DIODE, 1N4004A-B5 |
| D461 | 23357701 | DIODE, FMQ-3GU |
| D470 | 23357770 | DIODE, ZENER, MA8120-L |
| ⚠ D490 | 23357748 | DIODE, ZENER, MA8062-M |
| D491 | 23357703 | DIODE, 1SS355 |
| D492 | 23357765 | DIODE, ZENER, MA8100-M |
| D505 | 23357893 | DIODE, ZENER, MTZJ27C |
| D601 | 23357703 | DIODE, 1SS355 |
| D602 | 23357703 | DIODE, 1SS355 |
| D603 | 23357703 | DIODE, 1SS355 |
| D604 | 23357703 | DIODE, 1SS355 |
| D605 | 23357703 | DIODE, 1SS355 |
| D606 | 23357703 | DIODE, 1SS355 |
| D607 | 23357703 | DIODE, 1SS355 |
| D608 | 23357703 | DIODE, 1SS355 |
| D609 | 23357703 | DIODE, 1SS355 |
| D611 | 23357703 | DIODE, 1SS355 |
| D612 | 23357703 | DIODE, 1SS355 |
| D613 | 23357703 | DIODE, 1SS355 |
| D614 | 23357703 | DIODE, 1SS355 |
| D615 | 23357703 | DIODE, 1SS355 |
| D616 | 23357703 | DIODE, 1SS355 |
| D617 | 23357703 | DIODE, 1SS355 |
| D628 | 23357771 | DIODE, ZENER, MA8120-M |
| D751 | 23357104 | DIODE, 1SS244 |
| D752 | 23357104 | DIODE, 1SS244 |
| D801 | 23357712 | DIODE, D5SB60, 4009 F05 |
| D840 | 23362046 | DIODE, LN1WBA60 4101 |
| D841 | 23357746 | DIODE, ZENER, MA8056-H |
| D842 | 23357738 | DIODE, ZENER, MA8047-L |
| D843 | 23357366 | DIODE, FR105-B5 |
| D844 | 23357745 | DIODE, ZENER, MA8056-M |
| D845 | 23357703 | DIODE, 1SS355 |
| D846 | 23357684 | DIODE, ZENER, RD3.0ESA B2 |
| D847 | 23357684 | DIODE, ZENER, RD3.0ESA B2 |
| D848 | 23357703 | DIODE, 1SS355 |
| D851 | 23362051 | DIODE, D4SBL20U 4100 |
| D852 | 23357860 | DIODE, RL2Z |
| D853 | 23357860 | DIODE, RL2Z |
| D854 | 23357366 | DIODE, FR105-B5 |
| D862 | 23357366 | DIODE, FR105-B5 |
| D864 | 23357366 | DIODE, FR105-B5 |
| D873 | 23357893 | DIODE, ZENER, MTZJ27C |
| D875 | 23357852 | DIODE, ZENER, MTZJ9.1C |
| D876 | 23357905 | DIODE, ZENER, MTZJ36C |
| D878 | 23357850 | DIODE, ZENER, MTZJ9.1A |
| D879 | 23357893 | DIODE, ZENER, MTZJ27C |
| ⚠ D880 | 23357828 | DIODE, ZENER, MTZJ4.3B |
| D881 | 23357703 | DIODE, 1SS355 |
| D883 | 23357105 | DIODE, RL2 |
| D884 | 23357105 | DIODE, RL2 |
| D885 | 23362049 | DIODE, D4SBS4 4100 |
| D891 | 23362136 | DIODE, YG801C04RF119 |
| D892 | 23357408 | DIODE, FMX-12S(023-108) |
| D893 | 23357408 | DIODE, FMX-12S(023-108) |
| D894 | 23357703 | DIODE, 1SS355 |

| Location No. | Parts No. | Description |
|---|---|---|
| D895 | 23357748 | DIODE, ZENER, MA8062-M |
| ⚠ D899 | 76019485 | VARISTOR, TNR10V431K |
| D901 | 23357697 | DIODE, 1SS133 |
| D906 | 23357104 | DIODE, 1SS244 |
| D907 | 23357104 | DIODE, 1SS244 |
| D908 | 23357104 | DIODE, 1SS244 |
| D909 | 23357104 | DIODE, 1SS244 |
| D912 | 23357697 | DIODE, 1SS133 |
| D913 | 23357496 | DIODE, 1S1834(Q) |
| D916 | 23357104 | DIODE, 1SS244 |
| D917 | 23357104 | DIODE, 1SS244 |
| D918 | 23357104 | DIODE, 1SS244 |
| D919 | 23357104 | DIODE, 1SS244 |
| D921 | 23357697 | DIODE, 1SS133 |
| D926 | 23357104 | DIODE, 1SS244 |
| D927 | 23357104 | DIODE, 1SS244 |
| D928 | 23357104 | DIODE, 1SS244 |
| D929 | 23357104 | DIODE, 1SS244 |
| D936 | 23357496 | DIODE, 1S1834(Q) |
| D940 | 23357697 | DIODE, 1SS133 |
| D941 | 23357697 | DIODE, 1SS133 |
| D942 | 23357697 | DIODE, 1SS133 |
| D943 | 23357697 | DIODE, 1SS133 |
| D944 | 23357697 | DIODE, 1SS133 |
| D945 | 23357697 | DIODE, 1SS133 |
| D962 | 23357748 | DIODE, ZENER, MA8062-M |
| D967 | 23357496 | DIODE, 1S1834(Q) |
| D4430 | 23357365 | DIODE, 1N4004A-B5 |
| D4431 | 23357767 | DIODE, ZENER, MA8110-L |
| D7101 | 23357697 | DIODE, 1SS133 |
| D7102 | 23357697 | DIODE, 1SS133 |
| D7730 | 23357647 | DIODE, ZENER, RD6.2ESA B2 |
| D7731 | 23357647 | DIODE, ZENER, RD6.2ESA B2 |
| D7760 | 23357703 | DIODE, 1SS355 |
| D7761 | 23357629 | DIODE, ZENER, RD8.2ESA B2 |
| D7762 | 23357629 | DIODE, ZENER, RD8.2ESA B2 |
| D7763 | 23357703 | DIODE, 1SS355 |
| D7764 | 23357703 | DIODE, 1SS355 |
| D7766 | 23357703 | DIODE, 1SS355 |
| D7790 | 23357703 | DIODE, 1SS355 |
| D7791 | 23357703 | DIODE, 1SS355 |
| D7792 | 23357703 | DIODE, 1SS355 |
| D7793 | 23357759 | DIODE, ZENER, MA8082-M |
| D7806 | 23357703 | DIODE, 1SS355 |
| DB01 | 23358606 | DIODE, LED RED, SLR-56VC3FPQ |
| DB03 | 23358615 | DIODE, LED INFRARED, SIR-56SB3F |
| DH301 | 23357837 | DIODE, ZENER, MTZJ5.6B @E051Z - E054Z |
| **MISCELLANEOUS** | | |
| B231 | 23738088 | SCREW,BTBW3X12ECO |
| B232 | 23738108 | SCREW |
| B233 | 23738085 | SCREW, BTB4X12 ECO |
| B602 | 23738108 | SCREW |
| BB10 | 23713729 | SOCKET, B-B 8P 2.5MM |
| BB11 | 23713729 | SOCKET, B-B 8P 2.5MM |
| BB20 | 23713729 | SOCKET, B-B 8P 2.5MM |
| BB21 | 23713729 | SOCKET, B-B 8P 2.5MM |
| BB60 | 23713014 | PLUG, B-B 16P 1.5 |
| BB70 | 23713810 | PLUG , TAC-A46P-B1 |
| BB100 | 23368627 | CONNECTOR,BRIDGEB-B8P2.5JST08TM-2.5FJ-E |
| BB200 | 23368627 | CONNECTOR,BRIDGEB-B8P2.5JST08TM-2.5FJ-E |
| D461B | 23738136 | SCREW,3X10MM |
| D891B | 23717298 | SCREW |
| D892B | 23717298 | SCREW |
| D893B | 23717298 | SCREW |
| E906 | 23528465 | LENS HOLDER C975356E |

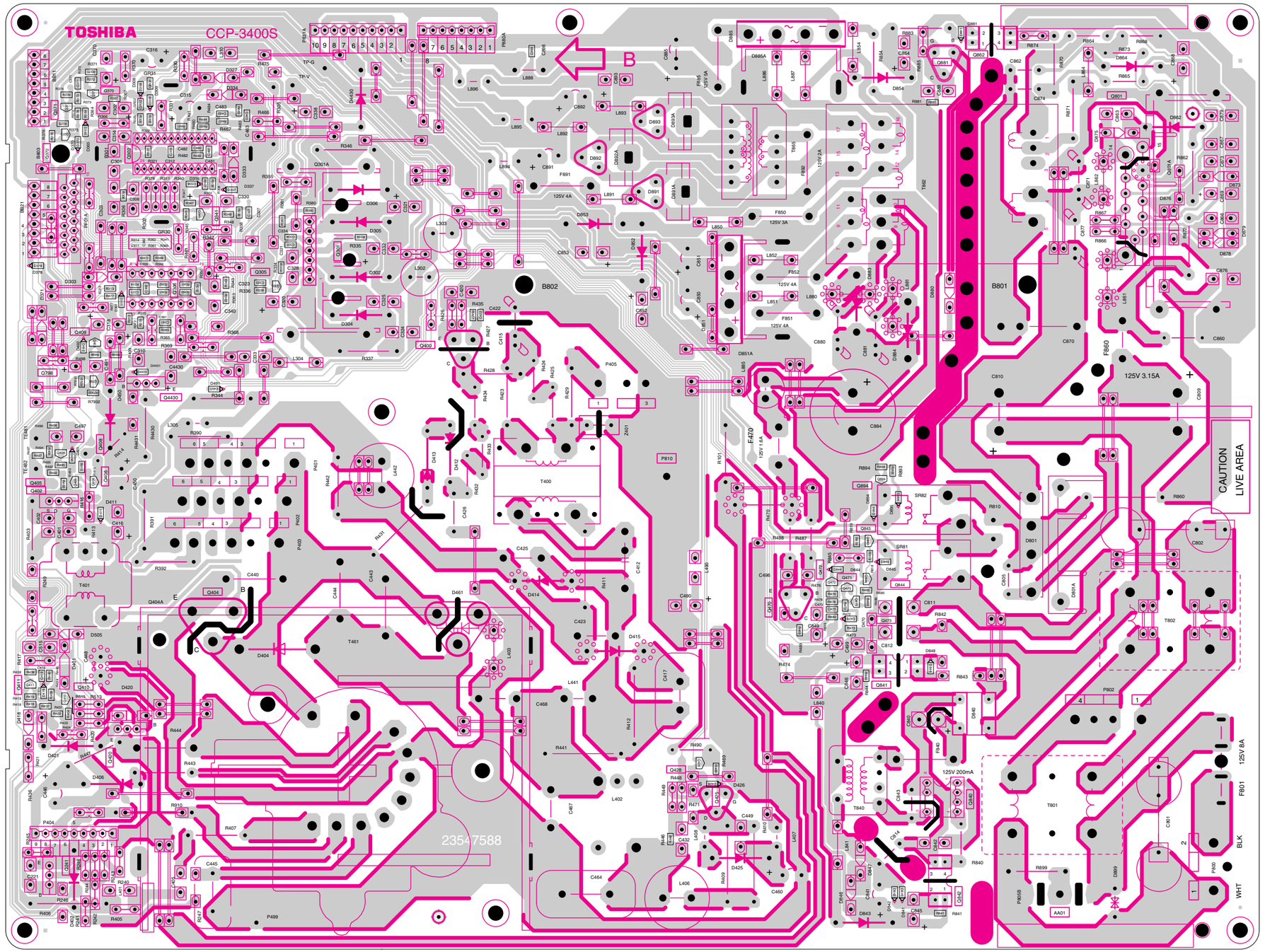
| Location No. | Parts No. | Description |
|---|---|---|
| E918 | 23737007 | BOLT |
| E929 | 23969684 | TAPE,GLASSCLOTH,W/ADHESIVEW=90T=0.18 |
| E936 | 23528465 | LENS HOLDER C975356E |
| E948 | 23737007 | BOLT |
| E959 | 23969684 | TAPE,GLASSCLOTH,W/ADHESIVEW=90T=0.18 |
| E966 | 23528465 | LENS HOLDER C975356E |
| E978 | 23737007 | BOLT |
| E989 | 23969684 | TAPE,GLASSCLOTH,W/ADHESIVEW=90T=0.18 |
| ⚠ F470 | 23144389 | FUSE, AXIAL 125V 1.6A |
| ⚠ F801 | 23144319 | FUSE, CARTRIDGE, 125V 8A, 5.2X20 |
| F801A | 23165433 | FUSE HOLDER, 5.2 SOC |
| F801B | 23165433 | FUSE HOLDER, 5.2 SOC |
| ⚠ F840 | 23144704 | FUSE, AXIAL 125V 200MA |
| ⚠ F850 | 23144712 | FUSE, AXIAL 125V 3.0A |
| ⚠ F851 | 23144714 | FUSE, AXIAL 125V 4.0A |
| ⚠ F852 | 23144714 | FUSE, AXIAL 125V 4.0A |
| ⚠ F860 | 23144392 | FUSE, AXIAL 125V 3.15A |
| ⚠ F885 | 23144715 | FUSE, AXIAL 125V 5.0A |
| ⚠ F891 | 23144714 | FUSE, AXIAL 125V 4.0A |
| ⚠ F892 | 23144710 | FUSE, AXIAL 125V 2.0A |
| G101 | 76011151 | CHIP, 1/20W 150 OHM J |
| G102 | 76011151 | CHIP, 1/20W 150 OHM J |
| GJ101 | 76000445 | CHIP JUMPER, 1608TYPE |
| GJ102 | 76000445 | CHIP JUMPER, 1608TYPE |
| GJ105 | 76000445 | CHIP JUMPER, 1608TYPE |
| GJ107 | 76000445 | CHIP JUMPER, 1608TYPE |
| GJ108 | 76000445 | CHIP JUMPER, 1608TYPE |
| GJ170 | 76000445 | CHIP JUMPER, 1608TYPE |
| GJ911 | 76000445 | CHIP JUMPER, 1608TYPE |
| GR31 | 76000445 | CHIP JUMPER, 1608TYPE |
| GR32 | 76000445 | CHIP JUMPER, 1608TYPE |
| GR103 | 76000445 | CHIP JUMPER, 1608TYPE |
| GR601 | 76000445 | CHIP JUMPER, 1608TYPE |
| H002 | 23148378 | IF MODULE, US BUFFER 6M TRAP, MVUS51A |
| H003 | 23124099 | ANTENNASWITCH,RSU135X1,2I3OBUNPAIUS |
| H003A | 23747055 | NUT, F-CONNECTOR 2H BS |
| K501 #1 | 23311088 | SCREEN,51KPLENTICULARSHEETSCREEN51KP-L |
| #2 | 23311128 | SCREEN,57KQLENTICULARSHEETSCREEN57KQ-L |
| K502 #1 | 23311016 | SCREEN,51KNFRESNELSHEETSCREEN51KN-F |
| #2 | 23311014 | SCREEN,57KNFRESNELSHEETSCREEN57KN-F |
| K503 #1 | 23311065 | SCREEN, PROTECTOR 51KN SCR-PRO51KN |
| #2 | 23311038 | SCREEN, PROTECTOR 57KN SCR-PRO57KN |
| K601 #1 | 23405484 | MIRROR,51WQG993/720*550T3MIRROR51WQG |
| #2 | 23405409 | MIRROR, 57WL MIRROR57WL |
| KB01 | 23000852 | IC, REMOCON RECEIVER, PIC-37043TE2 |
| MEM1 | 23340030 | MEMORY DATA/SOFT VER, TV MEMORY |
| MF01 | 23389291 | CABLE, FFC P1.25-16-200 |
| MF03 | 23389290 | CABLE, FFC P1.25-29-70 |
| P101 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| P102 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| P105 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| P404 | 23713760 | PLUG, NP 2.5MM G, B9B-EH-F1A |
| P710 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| P711 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| P712 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| ⚠ P800 | 23713702 | PLUG, 2P 11.88MM W VT |
| ⚠ P801 | 23372209 | POWER CORD, U/C FL 125V7A CMC042P JST |
| P880A | 23713759 | PLUG, 8P 2.5MM G, B8B-EH-F1-TV4 |
| P880B | 23713759 | PLUG, 8P 2.5MM G, B8B-EH-F1-TV4 |
| P900 | 23164563 | CONNECTOR, PLUG 3P @E051Z - E054Z |
| P913 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| P915A | 23713760 | PLUG, NP 2.5MM G, B9B-EH-F1A |
| P915B | 23713760 | PLUG, NP 2.5MM G, B9B-EH-F1A |
| P917 | 23713760 | PLUG, NP 2.5MM G, B9B-EH-F1A |
| P918 | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| P919 | 23713754 | PLUG, 3P 2.5MM G, B3B-EH-F1-TV4 |

| Location No. | | Parts No. | Description |
|---|---|---|---|
| PB22 | | 23713755 | PLUG, 4P 2.5MM G, B4B-EH-F1-TV4 |
| PV01 | | 23023311 | JACK, PIN 2S6P, LAP5030-0111GC |
| PV02 | | 23023205 | JACK, PIN 10P SMK KARI2 |
| PV03 | | 23023211 | JACK, PIN 7P SMK KARI04 |
| PV05 | | 23023184 | JACK, 1S3P, LAP5100-1502F |
| PV60 | | 23713761 | PLUG, NP 2.5MM G, B10B-EH-F1A |
| Q301B | | 23717240 | SCREW |
| Q404B | | 23738136 | SCREW,3X10MM |
| Q601B | | 23717240 | SCREW |
| Q711B | | 23738141 | SCREW |
| Q712B | | 23738141 | SCREW |
| SA01 | | 23344505 | SWITCH, PUSH 1C1P |
| SA02 | | 23344505 | SWITCH, PUSH 1C1P |
| SA03 | | 23344505 | SWITCH, PUSH 1C1P |
| SA04 | | 23344505 | SWITCH, PUSH 1C1P |
| SA05 | | 23344505 | SWITCH, PUSH 1C1P |
| SA06 | | 23344505 | SWITCH, PUSH 1C1P |
| SA07 | | 23344505 | SWITCH, PUSH 1C1P |
| SA08 | | 23344505 | SWITCH, PUSH 1C1P |
| SA09 | | 23344505 | SWITCH, PUSH 1C1P |
| SOF1 | | 23340029 | MEMORY DATA/SOFT VER, TV SOFT |
| SOF2 | #1 | 23340025 | MEMORY DATA/SOFT VER, TV CONVER |
| | #2 | 23340027 | MEMORY DATA/SOFT VER, TV CONVER |
| ⚠ SR81 | | 23146590 | RELAY, DLS5D1-O(M)0.25W |
| ⚠ SR82 | | 23146584 | RELAY, DC12V, TV5, DG-3 |
| ⚠ V901A | | 23903180 | SOCKET, ISHM62S-WE ICE |
| ⚠ V902A | | 23903180 | SOCKET, ISHM62S-WE ICE |
| ⚠ V903A | | 23903180 | SOCKET, ISHM62S-WE ICE |
| W661 | | 23351242 | SPEAKER, 160X160 8-OHM 20W SPK-1424AW |
| W662 | | 23351242 | SPEAKER, 160X160 8-OHM 20W SPK-1424AW |
| Z101 | | 23103840 | FERRITE CORE, TFE1013 |
| Z401 | | 23140203 | SPARKGAP,2.0-3.0KVC-010,AG20PC152F-L3N |
| ⚠ Z410 | | 23110857 | FOCUS PACK, TPA6030 |
| ⚠ Z450 | | 76083014 | CR-BLOCK, TPA5011AH |
| Z450A | | 23507612 | CABLE, ANODE, 400LD FBT-C |
| Z801 | | 23103840 | FERRITE CORE, TFE1013 |
| ZH04 | | 23103778 | FERRITE CORE, TFE1008 |
| ZH05 | | 23103840 | FERRITE CORE, TFE1013 |
| ZV60 | | 23103778 | FERRITE CORE, TFE1008 |
| **PC BOARD ASSEMBLIES** | | | |
| ✻ E021Z | | 23764148 | PC BOARD ASSY, BACK/AV PU PD1735D1 |
| ✻ E022Z | | 23764156 | PC BOARD ASSY, FRONT-CON PU PD1735D2 |
| ✻ E023Z | | 23764149 | PC BOARD ASSY, FRONT-IN PU PD1735D3 |
| ✻ E024Z | | 23764155 | PC BOARD ASSY, REMOTE PU PD1735D4 |
| ✻ E031Z | | 23764157 | PC BOARD ASSY, CRT/SVM/R PU PD1733F1 |
| ✻ E032Z | | 23764147 | PC BOARD ASSY, CRT/SVM/G PU PD1733F2 |
| ✻ E033Z | | 23764159 | PC BOARD ASSY, CRT/SVM/B PU PD1733F3 |
| ✻ E034Z | | 23764153 | PC BOARD ASSY, SVM/DIV PU PD1733F4 |
| ✻ E051Z | | 23764150 | PC BOARD ASSY, CONV-SEN PU PD0079C1 |
| ✻ E052Z | | 23764152 | PC BOARD ASSY, CONV-SEN2 PU PD0079C2 |
| ✻ E053Z | | 23764151 | PC BOARD ASSY, CONV-SEN3 PU PD0079C3 |
| ✻ E054Z | | 23764154 | PC BOARD ASSY, CONV-SEN4 PU PD0079C4 |
| ✻ U001 | | 23148421 | SCAN CONVERTER MODULE, MHSU11 |
| ✻ U401 | | 23764407 | PC BOARD ASSY, DEF POWER PU PD2201B |
| ✻ U601 | | 23764158 | PC BOARD ASSY, IF/AUDIO PU PD1731C2 |
| ✻ US01 | | 23764160 | PC BOARD ASSY, SPK/CAPA PU PD2065B |
| ✻ UV02 | | 23148418 | MODULE, 05HDMI-01A-G MHDM01A |
| **PICTURE TUBE** | | | |
| V901R | #1 | 23447987 | COUPLING, RS51H85M |
| | #2 | 23447990 | COUPLING, RS57H85M |
| V902G | | 23447988 | COUPLING, GS51H85M |
| V903B | #1 | 23447989 | COUPLING, BS51H85M |
| | #2 | 23447991 | COUPLING, BS57H85M |

| Location No. | | Parts No. | Description |
|---|---|---|---|
| **TUNER** | | | |
| ⚠ H001 | | 23321482 | TUNER, US181CH IIC PH 5V PANA ELA52LX5 |
| ⚠ HY01 | | 23321480 | TUNER, TIF US IIC PH 181CH 5V ENG36A18GF |
| **ACCESSORIES** | | | |
| A701 | #1 | 23067099 | CARTON, CARTON 51H83 |
| | #2 | 23067100 | CARTON, CARTON 57H83 |
| A703 | #1 | 23946479 | PACKING, TOP PACKING 51H83 |
| | #2 | 23946481 | PACKING, TOP PACKING 57H83 |
| A708 | #1 | 23946478 | PACKING, BOTTOM PACKING 51H83 |
| | #2 | 23946480 | PACKING, BOTTOM PACKING 57H83 |
| A709 | #1 | 23946483 | PACKING, BOTTOM TRAY 51H83 |
| | #2 | 23946187 | PACKING, BASE TRAY 57H81 |
| ⚠ K912 | | 23306596 | REMOCON HAND UNIT, CT-90159 |
| ⚠ Y101 | | 23566608 | OWNERS MANUAL, ENGLISH/FRENCH |
| **CABINET PARTS** | | | |
| ⚠ A001 | #1 | 23429055 | CABINET, WOOD, 51H84 |
| ⚠ | #2 | 23429091 | CABINET, WOOD, 57H84 |
| A102 | #1 | 23527340 | GRILLE, SPEAKER GRILLE 51HX84 |
| | #2 | 23532908 | COVER, SPEAKER GRILLE ASSEY 57HX84 |
| A160 | | 23469228 | CASTER, TP50H60 |
| ⚠ A201 | #1 | 23532675 | COVER, BEZEL ASSEY 51HX84 |
| ⚠ | #2 | 23532980 | COVER, BEZEL ASSEY 57HX84 |
| A202 | | 23450694 | PANEL, CONTROL PANEL ASSEMBLY 51HX83 |
| A213 | | 23428227 | DOOR, DOOR 57HX83 |
| A215 | | 23929911 | PIECE, SNAP-IN GEAR DAMPER CONNON |
| A222 | | 23929910 | PIECE, FILTER, 57HX83 |
| A223 | | 23445719 | BUTTON, POWER BUTTON 51H93 |
| A268 | #1 | 23530772 | COVER, FRONT COVER 51H83 |
| | #2 | 23530770 | COVER, FRONT COVER 57HX83 |
| A331 | #1 | 23940053 | PIECE, POLE BOTTOM LEFT 51HX84 |
| | #2 | 23940127 | PIECE, POLE BOTTOM LEFT 57HX84 |
| A332 | #1 | 23940054 | PIECE, POLE BOTTOM RIGHT 51HX84 |
| | #2 | 23940128 | PIECE, POLE BOTTOM RIGHT 57HX84 |
| ⚠ A401 | #1 | 23530781 | COVER, BACK COVER 51H83 |
| ⚠ A421 | | 23530812 | COVER, REAR BOARD 57H83 |
| ⚠ A424 | | 23429059 | CABINET, BACK BOARD 51H84 |
| A510 | | 23030815 | SCREW, WOOD, PTD #6 X 3/4 |
| A721 | | 23943628 | PLYETHLENE COVERING 46GM88T |

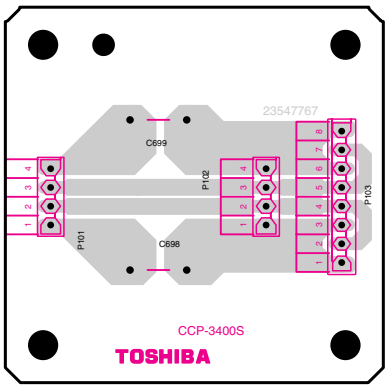
# DEF POWER BOARD PD2201B (U401)

**BOTTOM (FOIL) SIDE**



# SPK/CAPA PD2065B (US01)

## BOTTOM (FOIL) SIDE



DEF/POWER

TO HYPER/SIGNAL

P701A
16P0.8114K-N

| | | | |
|---|---|---|---|
| H_OUT | 1 | H_OUT | 2-E1 |
| H_OUT_GND | 2 | | |
| ABL_SW | 3 | ABL_SW | 2-C1 |
| AFC | 4 | AFC | 2-D1 |
| ABL | 5 | ABL | 2-C1 |
| GND | 6 | | |
| H_CONV | 7 | H_CONV | 2-E1 |
| ACP | 8 | ACP | 3-E7 |
| POWER | 9 | POWER | 3-E7 |
| BLK_UP | 10 | | |
| H_PHA_COM | 11 | H_PHA_COM | 2-B1 |
| GND | 12 | | |
| SDA1 | 13 | SDA1 | 2-B8 |
| SCL1 | 14 | SCL1 | 2-B8 |
| V_STOP_BLK | 15 | V_STOP_BLK | 2-C1 |
| VP_Q510 | 16 | VP_Q51 | 2-A1 |

P801A
10P_2.5mm_1.5A_Beige

| | | | |
|---|---|---|---|
| +4.5V | 1 | 4.5V | 3-A7 |
| GND | 2 | | |
| +5V-1 | 3 | 5V1 | 3-E7 |
| GND | 4 | | |
| +7V | 5 | 7V | 3-A7 |
| GND | 6 | | |
| H.Vcc | 7 | HVCC | 2-D1 |
| +9V-1 | 8 | 9V1 | 2-C1 |
| GND | 9 | | |
| +11V | 10 | 11V | 3-B7 |

P900
Lock 2P_11.68mm_S

P901
POWER CORD
CMC04(P22072036)
or VM4S94(22072194)

3-F1 AC_L1 AC_N 3-F1

3-E1 AC_L2 AC_N2 3-D1

P902
OPEN

AC_L2 NC NC AC_N2

TO SUB POWER

2-D9 DF_V GND 3-C7

P405
B03B-DVS-L

A_ADJ GND GND

TO FOCUS PACK

2-D9 H_IN 2-D9 H_VEE 2-C9 V_IN1 2-B8 V_OUT1

P403
6P_5mm_5A

2-B8 V_OUT2

P402
6P_5mm_5A

2-B8 V_OUT3

P401
6P_5mm_5A

L464
TDY707AS(R)

L463
TDY707AS(R)

L462
TDY707AS(R)

3-C7 GND GND

P810
1P

3-C7 150V 2-C9 CRT_RP 2-C9 HEATER 2-C9 220V

+150V NC GND CRT HT GND CRT HEATER HEATER NC 220V

P404
6P_2.5mm_1.5A_Beige

TO CRT DRIVE

TO SVM

TO CONVER

3-B7 11V +11V
GND
2-C1 CONV_ABL CONV_ABL
GND
2-E1 H_CONV H_CONV
2-D1 AFC AFC
2-C1 V_DF1 V_DF
2-B1 V_BLK V_BLK

BB21
6P 2.5PJ-P

3-B7 -21V CONVER-21V
GND
2-B7 -16V2 -16V
GND
2-B7 16V2 +16V
3-C7 PROTECT PROTECT
GND
3-B7 21V CONVER+21V

BB11
6P 2.5PJ-P

TO IF/AUDIO

3-C7 32V TUNER32V
3-C7 AVCC Audio Vcc
Audio Vcc
Audio Vcc
3-C7 AGND Audio GND
Audio GND
Audio GND
3-B7 11V +11V

P880A
8P_2.5mm_1.5A_Beige

3-F2 TGND TUNER GND

P805B
1P

51H85C/57H85C
DEF POWER (1/3)
SHEET-1/3

(1/4)

51H85C/57H85C
DEF POWER (2/3)
SHEET-2/3

LIVE AREA

7V 1-D2
4.5V 1-C2
11V 1-D8
16V1 2-B7
+16V1 2-C7
21V 1-C8
-21V 1-B8
120V 2-D1
32V 1-C8
GND 2-D8
X-RAY 2-D1
AVCC 1-C7
AGND 1-C7
ROTECT 1-A2
POWER 1-C2
5V1 1-C2
ACP 1-C2

1-D3 AC_N2
1-D3 AC_L2
1-D2 AC_L1
1-D3 AC_N1
1-D6 TOAD

① 5 µs 100 V

② 5 ms 100 V

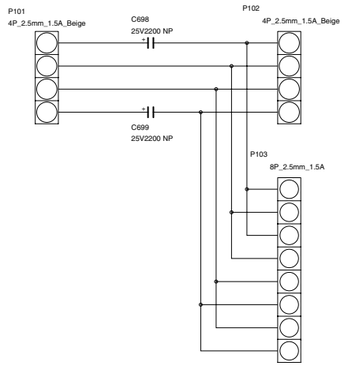
Magnifying

③ 5 µs 5.0 V

④ 5 µs 5.0 V

⑤ 5 ms 1.00 V

51H85C/57H85C
DEF POWER (3/3)
SHEET-3/3




OPEN

51H85C/57H85C
SPEAKER CONNECTION

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

TOSHIBA

FILE NO. 020-200404

SERVICE MANUAL

# Projection Television

N4PSP Chassis

**46H84**
**51H84**
**57H84**

Published in Japan, May. 2004 (YC)

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CIRCUIT DIAGRAM

# CHAPTER 1 GENERAL ADJUSTMENTS

## SAFETY INSTRUCTIONS

**WARNING**: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" INSTRUCTIONS BELOW.

### X-RAY RADIATION PRECAUTION

1. Excessive high voltage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this receiver is (A) kV at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed (B) kV.

   Refer to table-1 for high voltage (A), (B).
   (See SETTING & ADJUSTING DATA on page 20)

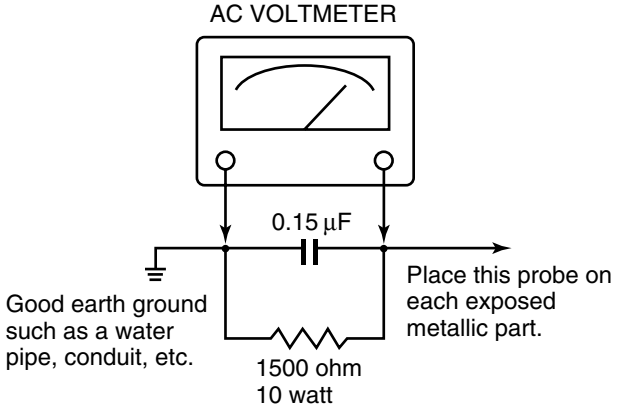
   Each time a receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This receiver is equipped with a Fail Safe (FS) circuit which prevents the receiver from producing an excessively high voltage even if the B+ voltage increases abnormally. Each time the receiver is serviced, the FS circuit must be checked to determine that the circuit is properly functioning, following the FS CIRCUIT CHECK procedure in this manual.
3. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some part in this receiver have special safety-related characteristics for X-RAY RADIATION protection. For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

### SAFETY PRECAUTION

WARNING : Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The following are the necessary precautions to be observed before servicing this chassis.

1. An isolation Transformer should be connected in the power line between the receiver and the AC line before any service is performed on the receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, terminals, screwheads, metal overlays, control shafts etc. to be sure the set is safe to operate without danger of electrical shock. Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check). Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:

   Connect a 1500 ohm 10 watt resistor, paralleled by a 0.15 μF, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time. Measure the AC voltage across the combination of 1500 ohm resistor and 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0.675 volts rms. This corresponds to 0.45 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

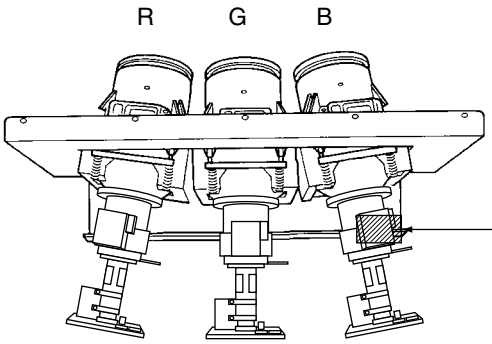

AC VOLTMETER
0.15 μF
Good earth ground such as a water pipe, conduit, etc.
Place this probe on each exposed metallic part.
1500 ohm
10 watt

### PRODUCT SAFETY NOTICE

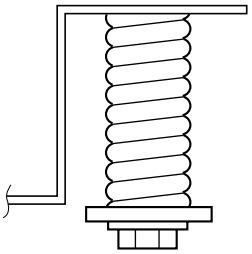
Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock, fire, X-ray radiation or other hazards.

# CRT ASSEMBLY REPLACEMENT AND MOUNTING

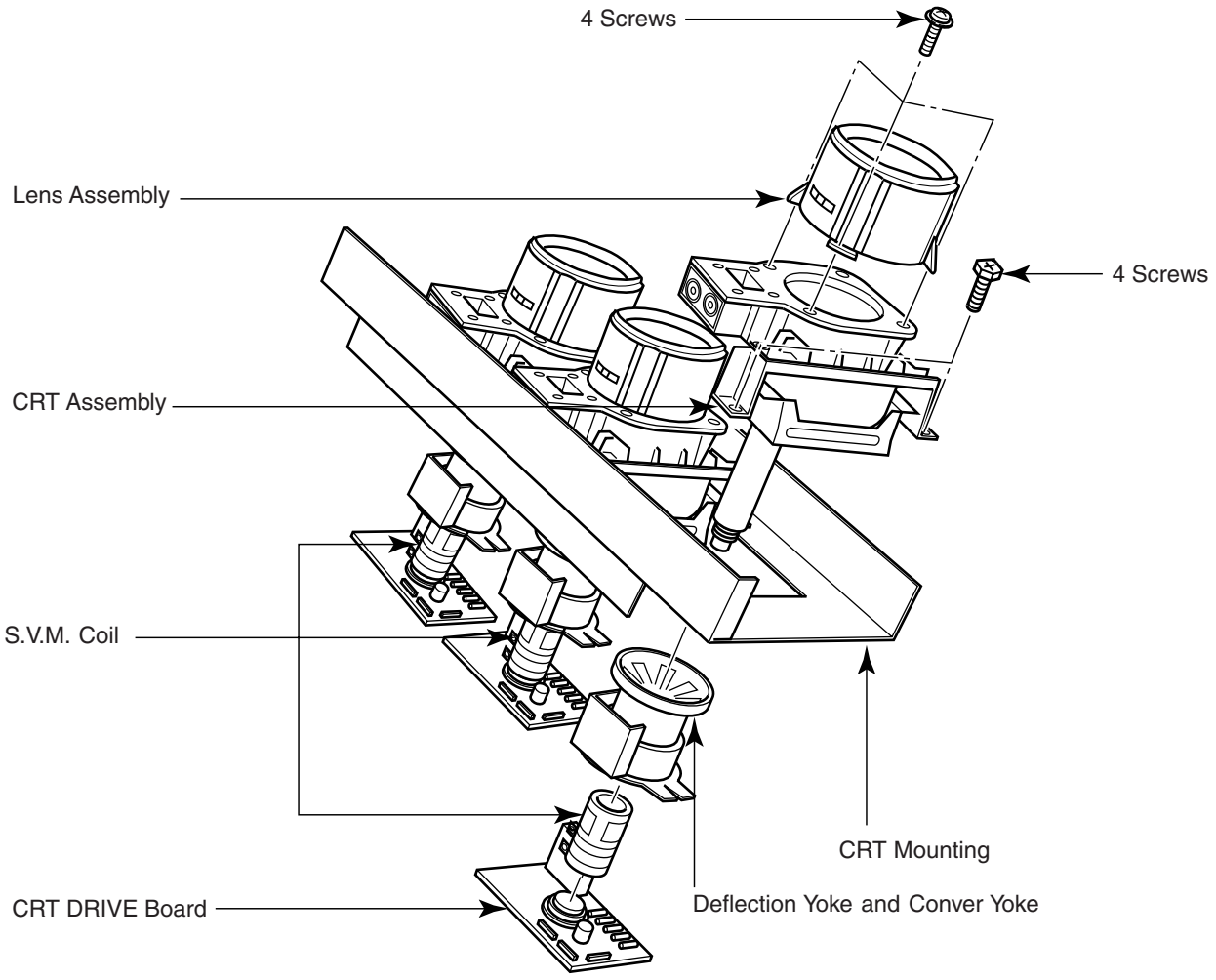
**CAUTION : DO NOT LOOSEN THE HEX HEAD BOLTS WITH SPRINGS (12 PCS), BECAUSE THOSE ARE FOR SEALING OF CRT COOLANT.**




## Attention Serviceman



The Hex Head Bolts with Springs. (see sketch) used on CRT assembly, are NOT Adjustment Screws DO NOT LOOSEN-FLUID LEAKAGE WILL OCCUR.




**Lens and Neck Components View**

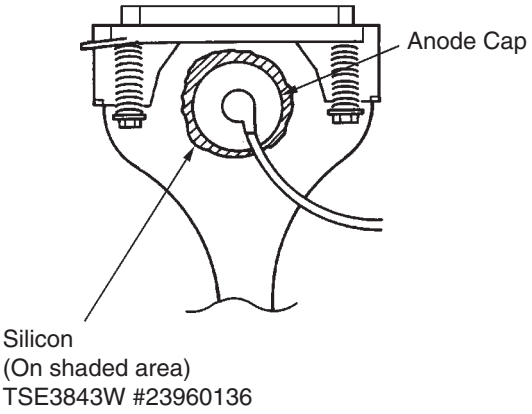
TO REMOVE CRT (Same procedure for R, G, B)

1. Remove CRT DRIVE Board, S. V. M. COIL and DEF. YOKE from CRT.
2. Remove Lens Assembly.
3. Detach CRT Anode Cap from CRT.
4. Remove CRT Assembly from CRT Mounting.

CRT REPLACEMENT (Same procedure for R, G, B)
Reverse the removal procedures except the followings.

1. Anode Cable should be replaced with new one. See “SERVICING PRECAUTIONS” shown below.
2. Install silicon (T461B) to the CRT, replace the Anode cable and put enough silicon again on around the Anode Cap as illustrated.

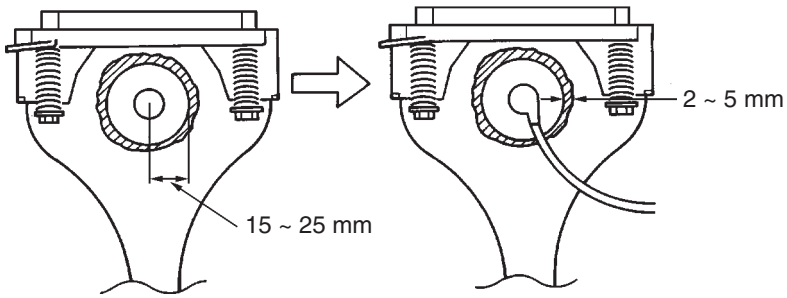
CAUTION: Align the Anode cable as illustrated on page 4.




ADJUSTING PROCEDURE IN REPLACING CRT

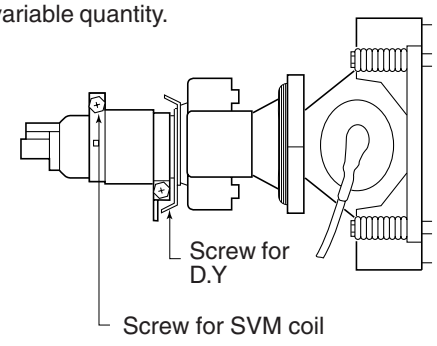
1. R.G.B. FOCUS ADJUSTMENT (page 7.)
2. PICTURE TILT ADJUSTMENT (page 7.)
3. USER CONVERGENCE CENTER CHECK (See owner's manual.)
4. CENTERING ADJUSTMENT (page 7.)
5. CONVERGENCE ADJUSTMENT (page 15.)
6. WHITE BALANCE ADJUSTMENT (page 12.)

Adjustments are complete.



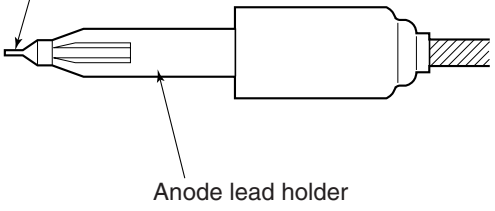

## SERVICING PRECAUTIONS

■ Do not use a magnetized screw driver for screws of Deflection Yoke and Velocity Modulation Coil to avoid magnetization of electron gun. Magnetization of electron gun will degrade basic function and result in unbalance of right and left shift of user static convergence, and result in no variable quantity.




■ When replacing the anode cap assembly (CRT) or anode lead assembly (F.B.T.), remove the anode lead holder from old one and attach the holder again to new anode lead.

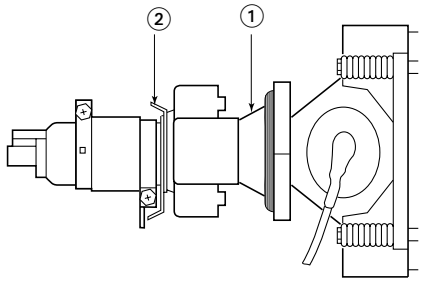
■ Check the point of anode lead in a straight line, if it is winding, please revise it.



**WARNING :** BEFORE SERVICING THIS CHASSIS, READ THE “X-RAY RADIATION PRECAUTION”, “SAFETY PRECAUTION” AND “PRODUCT SAFETY NOTICE” ON PAGE 3 OF THIS MANUAL.

# PICTURE TUBE COMPONENTS ADJUSTMENT

**DESCRIPTION OF NECK COMPONENTS**




① Deflection yoke and convergence yoke
The position on the neck is required most front (CRT funnel side) and the screw is fastened after rotating yoke adjusting picture tilt.

② Centering magnet
After adjusting picture tilt, picture position is finally fixed by this magnet.
In order to get maximum margin of user convergence control for center of screen, this magnet have to be used for center convergence adjustment.

PREPARATION
Operate the receiver for at least 5 minutes.

**R, G, B FOCUS ADJUSTMENT**

1. Before adjusting the R, G, B FOCUS, remove the 4 screws of Lens Assembly which is fixed on the CRT Assembly. (See page 4.)
   Then turn around the Lens Assembly by 180 to adjust the fastening screw (Fig. a) and fasten the 4 screws to secure Lens Assembly.
2. Select the adjustment mode. (See page 10.)
3. Press “7” button to display the built-in cross-hatch.
4. Press “0” and “RTN” buttons to make the picture a single Red color.
   100 button ..... to erase Red color
   0 button ..... to erase Green color
   RTN button ..... to erase Blue color.
5. Loosen the fasten screw and adjust Red lens focus to best focusing point of picture center. Then fasten the screw. (See Fig. a.)

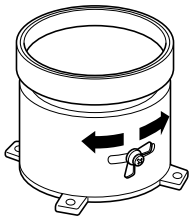


**Fig. a**

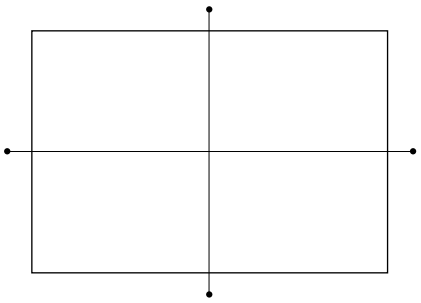
6. Adjust FOCUS VR “R” of FOCUS PACK to find best focusing point of picture center.
7. Repeat steps 3 to 5 for Green and Blue colors.

**TILT ADJUSTMENT**

Rotate R, G, B deflection yoke so that picture becomes horizon, then fasten screw.

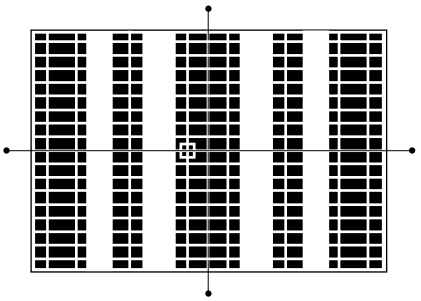
**CENTERING ADJUSTMENT**

1. Stretch a thread between two center of screen edge (top and bottom, left and right).



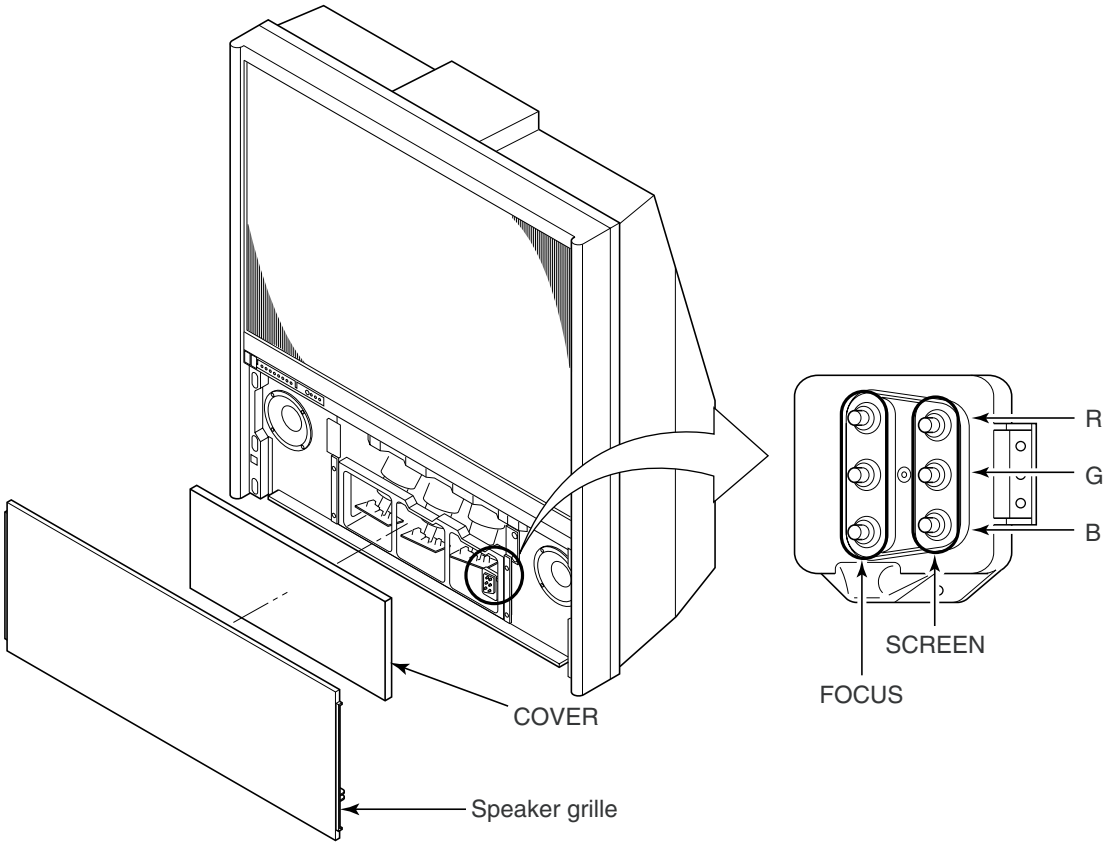
2. Receive NTSC.
   Then select SERVICE MODE. (See Page 10.)

3. Select CONVERGENCE ADJUSTING mode, and press "7" button to display the internal net pattern.
   Move Cursol and recognize horizontal line indicated Y:4. This line is vertical center. Push "9" button to display the vertical stripes, and recognaize horizontal center.



4. Perform VCEN adjustment. (See page 16.)
5. Adjust G centering magnet so that the cross-bar pattern center comes to screen center.
6. Perform HEIGHT adjustment .
7. Perform VERT. LINEARITY adjustment.
8. Perform WIDTH adjustment. (See page 16.)
9. Check whole quality of green line.
10. Adjust R, B centering magnet so that the cross-bar pattern center comes to screen center.

**LOCATION OF SCREEN AND FOCUS VR'S**

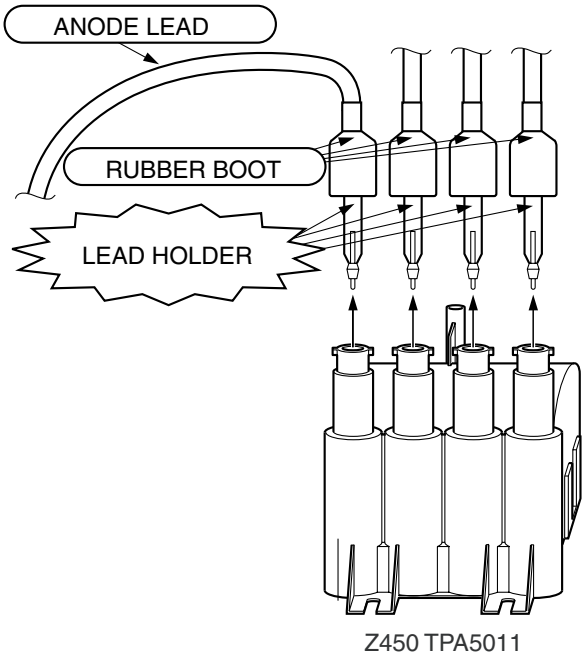


# REPLACEMENT OF THE CRT

Service parts are provided for each R, G and B.
The contents of the parts are as follows.

| | | R | G | B |
|---|---|---|---|---|
| 46H84/57H84 | HOKUTO | 2334118 | 2334119 | 2334120 |
| 51H84 | HITACHI | 2334122 | 2334123 | 2334124 |

**REPLACEMENT OF HIGH VOLTAGE CABLE**




Z450 TPA5011

**Fig. a**

1. When replacing Anode Lead or Anode Cap with new one, remove Lead Holder from old lead as shown in figure below, and put it on new lead. Do not throw away Lead Holder.

**NOTE : THE LEAD HOLDER IS ATTACHED TO TPA5011 (Z450), BUT IS NOT ATTACHED TO ANODE LEAD AND ANODE CAP. RUBBER BOOT IS ATTACHED TO ANODE LEAD AND ANODE CAP.**

2. Detaching Lead Holder

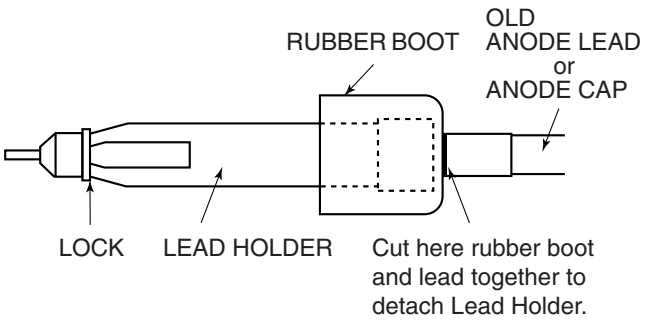



**Fig. b**

# SERVICE MODE

## 1. ENTERING TO SERVICE MODE

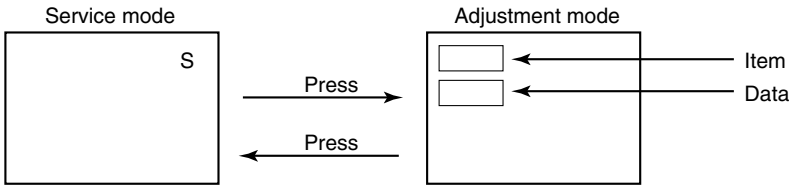
1) Press MUTE button twice on Remote Control.
2) Press MUTE button again to keep pressing.
3) While pressing the MUTE button, press MENU button on TV set.




(Service mode display)

## 2. DISPLAYING THE ADJUSTMENT MENU

1) Press MENU button on TV.




## 3. KEY FUNCTION IN THE SERVICE MODE

The following key entry during display of adjustment menu provides special functions.

| | |
|---|---|
| Screen adjustment mode ON/OFF: | TV (ANT)/VIDEO button (on TV) |
| Selection of the adjustment items : | Channel ▲/▼ (on TV or Remote) |
| Change of the data value : | Volume ▲/▼ (on TV or Remote) |
| Adjustment menu mode ON/OFF : | MENU button (on TV) |
| Initialization of the memory (QA02) : | RECALL+Channel button on TV (▲) |
| Initialization of the self diagnostic data: | RECALL+Channel button on TV (▼) |

| | |
|---|---|
| “RCUT” selection : | 1 button |
| “GCUT” selection : | 2 button |
| “BCUT” selection : | 3 button |
| “SCNT” selection : | 4 button |
| “COLC” selection : | 5 button |
| Convergence adj : | 7 button |
| Self diagnostic display : | 9 button |

**4. SELECTING THE ADJUSTING ITEMS**

1) Every pressing of CHANNEL ▲ button in the service mode changes the adjustment items in the order of table-2. (▼ button for reverse order)

Refer to table-2 for preset data of adjustment mode.
(See SETTING & ADJUSTING DATA on page 20)

**5. ADJUSTING THE DATA**

1) Pressing of VOLUME ▲ or ▼ button will change the value of data in the range from 00H to FFH. The variable range depends on the adjusting item.

**6. EXIT FROM SERVICE MODE**

1) Pressing POWER button to turn off the TV once.

**■ INITIALIZATION OF MEMORY DATA OF QA02**

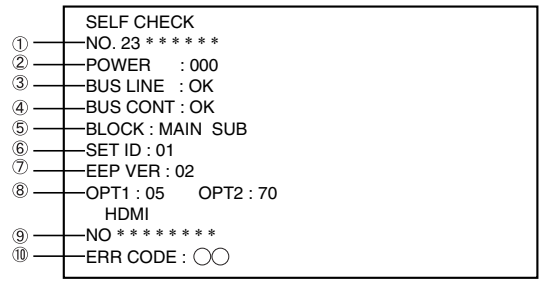
After replacing QA02, the following initialization is required.

1. Enter the service mode, then select any register item.
2. Press and hold the RECALL button on the Remote, then press the CHANNEL ▲ button on the TV. The initialization of QA02 has been complated.
3. Check the picture carefully. If necessary, adjust any adjustment item above. Perform “Programming Channel Memory” on the owner's manual.

CAUTION: Never attempt to initialize the data unless QA02 has been replaced.

**7. SELF DIAGNOSTIC FUNCTION**

1) Press “9” button on Remote Control during display of adjustment menu in the service mode. The diagnosis will begin to check if interface among IC’s are executed properly.
2) During diagnosis, the following displays are shown.

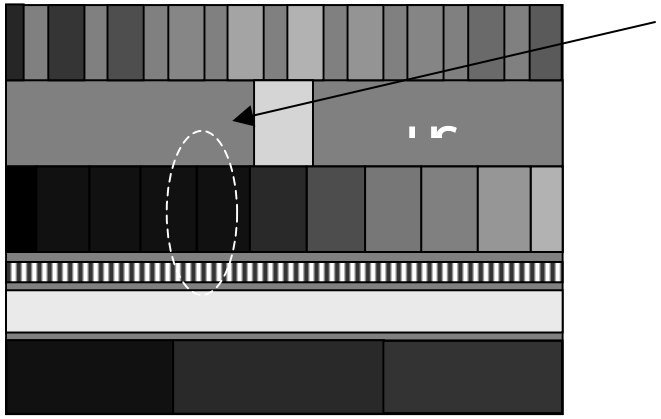

SELF CHECK
① NO. 23 * * * * * *
② POWER : 000
③ BUS LINE : OK
④ BUS CONT : OK
⑤ BLOCK : MAIN SUB
⑥ SET ID : 01
⑦ EEP VER : 02
⑧ OPT1 : 05 OPT2 : 70
HDMI
⑨ NO * * * * * * * *
⑩ ERR CODE : ○○

① Part number of microprocessor (QA01)
② Operation number of protection circuit (current limiter) . . . . “000” is normal.
③ BUS line check
- “OK” ..... Normal
- “SCL-GND” or “NG” ..... SCL-GND short circuit
- “SDA-GND” or “NG” ..... SDA-GND short circuit
- “SCL-SDA” or “NG” ..... SCL-SDA short circuit

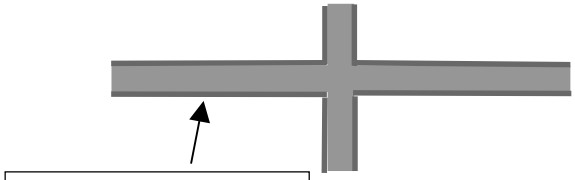
④ BUS line ACK (acknowledge) check
- “OK” ..... Normal
- Display of Location Number . . . . NG
- (Display example)
- “QA02 NG”, “H001 NG”, “Q501 NG” etc.
- Note: The indication of failure place is only one place though failure places are plural. When repair of a failure place finishes, the next failure place is indicated. (The order of priority of indication is left side.)

⑤ Sync. signal check
- Green display ..... Normal
- Red display ..... NG
  - MAIN ..... Main sync
  - SUB ..... Sub sync (when turn on the PIP)

⑥ ID code for TV Set
⑦ Version of "EEP"
⑧ Data for "OPT"
⑨ Part number of HDMI microprocessor
⑩ HDMI error code

| ADJUSTING ITEM | PROCESS INSTRUCTIONS | SIGNAL | ADJUSTMENT SPECIFICATION |
|---|---|---|---|
| SCREEN ADJUST | 1. Heart run minimum 15minutes.<br>2. Go into screen adjustment mode.<br>Adjust Focus pack Screen VR of Red, Green, and Blue by looking directly into each CRT and adjusting each screen VR until CRT is just lit on left side of CRT. | | |
| WHITE BARANCE ADJUSTMENT | 1. Adjust white luster level to get 4.3cd/m2 on dark area, and get 264.3cd/m2 on bright area.<br>2. Using the data up and down keys, cycle through the adjustments for RED DRIVE, BLUE DRIVE, RED BIAS and BLUE BIAS.<br>Adjust RED DRIVE, BLUE DRIVE for bright area, and adjust RED BIAS and BLUE BIAS for dark area.<br>3. Continue to make adjustments color temperature to spec on each area. | White luster signal (Valuable input level) | 10500k+0UV<br>Same spec is applied on dark area and bright area. |
| SUB-BRIGHT ADJUSTMENT | 1. Receive channel 3 Sub-Bright pattern.<br>2. Go into BRTC of service mode.<br>3. Press DATA UP/DOWN to adjust Sub-Bright level to spec.<br>5th bar sunk<br>  | CHANNEL 3 SUB-BRIGHT SIGNAL | 5TH±1<br>BAR SUNK |

FOCUS ADJUSTMENT (1/2)

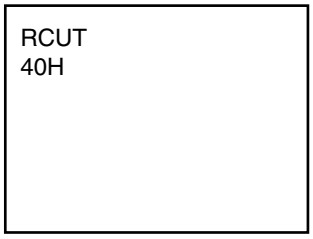
| ITEM | ADJUSTMENT METHOD |
|---|---|
| Focus Adjustment | (Condition)<br>• User Adjustment : SPORTS (CONTRAST MAX, BRIGHTNESS CENTER)<br>• Adjust after Centering Magnet adjusts.<br>• Signal : Lens Focus : R Dot cross (NTSC)<br>G Dot cross (NTSC)<br>B Dot cross (NTSC)<br>Electrical Focus : R Dot cross (NTSC)<br>G Dot cross (NTSC)<br>B Dot cross (NTSC)<br><br>(Adjustment)<br>1. Common Items<br>1) Rough Adjust the lens focus and electrical focus of each color(R, G, B).<br>2. Green Adjustment<br>1) Receive green single color by shielding jig.<br>2) Receive the Dot Cross pattern.<br>3) Adjust Green electrical focus.<br>Adjust Green electrical focus VR on focus pack (Z410) for best center focus.<br><br>If the focus blur on screen center and circumference, adjust the electrical focus is best point on all of screen.<br><br>4) Adjust Green lens focus.<br>Receive the Dot Cross pattern. Adjust Green lens for best center focus.<br><br>Green lens focus adjustment target<br>Dot-cross has red flare (red flare width :1mm)<br><br>  <br><br><br>5) Repeat (3)~(4),and adjust best focus point. |

FOCUS ADJUSTMENT (2/2)

| ITEM | ADJUSTMENT METHOD |
|---|---|
| Focus Adjustment | 3. Red Adjustment<br>1) Receive Red single color by shielding jig.<br>2) Receive the Dot Cross pattern.<br>3) Adjust Red electrical focus.<br>Adjust Red electrical focus VR on focus pack (Z410) for best center focus.<br>4) Adjust Red lens focus.<br>Receive the Dot Cross pattern. Adjust Red lens for best center focus.<br><br>5) Repeat (3)~(4),and adjust best focus point.<br><br>4. Blue Adjustment<br>1) Receive Blue single color by shielding jig.<br>2) Receive the Dot Cross pattern.<br>3) Adjust Blue electrical focus.<br>Adjust Blue electrical focus VR on focus pack (Z410) for best center focus.<br>(The Brightness is minimum point of Blue.)<br><br>4) Adjust Blue lens focus.<br>Receive the Dot Cross pattern. Adjust the Blue lens for best center focus.<br><br>After easy lens adjustment, turn to right side lens focus screw,<br>and so dot-cross has flare.<br>Next turn left focus screw, so flare disappears in Dot-Cross and Dot-Cross become blur.<br>This point is blue lens focus adjustment target. (flare disappear and become blur) |

# CONVERGENCE ADJUSTMENT

1. Receive NTSC signal.
2. Enter to the service mode. (See Page 10.)




3. Press "7" button to enter the convergence adjusting mode, and the internal net pattern will be displayed. Then, press "9" button to display veritcal stripes.
4. Select the point and the color by pressing following buttons. (Cursor should be blinking.)
   "2", "8", "4", "6" : To select point
   "3" : To select color
5. Then press "5" button, and adjust the convergence by pressing following buttons. (Cursor should not be blingking.)
   "2", "8", "4", "6" : To adjust convergence
   "3" : To select color
6. Repeat from steps 3 to 4 until the convergence and the geometry become fine. (See Page 14.)
7. Press "7" button to memorize the adjusted data.
8. Message of "PLEASE PUSH TOUCH FOCUS" will be displayed, and press TOUCH FOCUS button which is located on the front panel.
9. TOUCH FOCUS CALIBRATION will start.
10. Soon message of "CALIBRATION FINISHED" will be displayed, and then a normal picture will be displayed.
11. Then push TOUCH FOCUS button again, and confirm that the convergence does not change.

Note: If message of "TOUCH FOCUS ERROR" is displayed,
1) Check the connection between four sensors and Convergence Unit.
2) Check the geometry of internal net pattern. (See Page 14.)

If any problem cannnot be found, hardware might have problem.

EXPLANATION OF KEY-FUNCTION IN THE CONVERGENCE ADJUSTMENT MODE

| | |
|---|---|
| Load BACK UP DATA: | 1 button |
| Up : | 2 button |
| Selet Green color: | 3 button |
| Left : | 4 button |
| Blinking of cursor ON/OFF: | 5 button |
| Right: | 6 button |
| Adjust mode ON/OFF: | 7 button |
| Down: | 8 button |
| Vertical stripe ON/OFF | 9 button |
| Erase Green line: | 0 button |
| Erase Red line: | 100 button |
| Erase Blue line: | ENT button |

Note: The following message will appear while pressing "1" button.
ENTER: TO LOAD BACKUP DATA
MUTE: TO LOAD INITIAL DATA
EXIT: TO EXIT

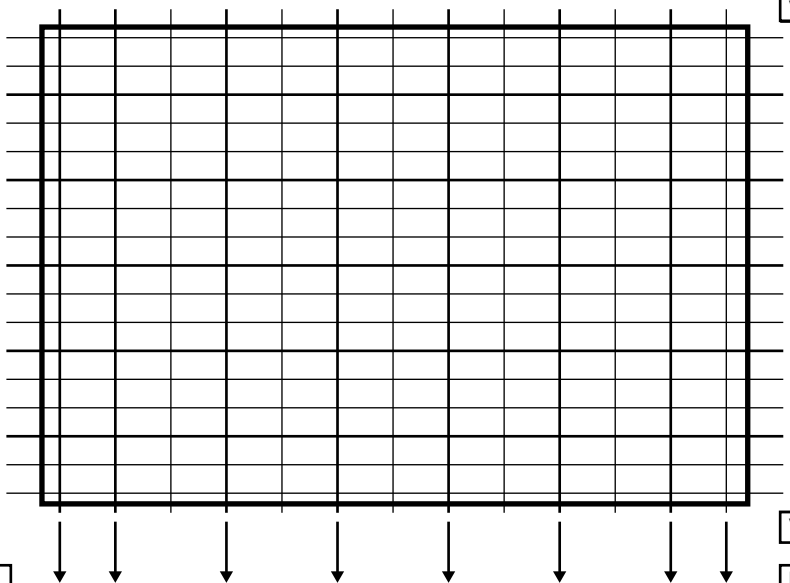
BACKUP DATA sets in factory by performing CALIBRATION. BACKUP DATA updates by performing CALIBRATION again. INITIAL DATA uses the seed data on this model. Thus, it cannot updates. INITIAL DATA is not adjusted. Therefore, convergence data operates incorrectly. Normally, BACKUP DATA operates as base data on this model. If BACKUP DATA is incorrectly operated, INITIAL DATA is operated instead of BACKUP DATA.

DEFRECTION and CONVERGENCE

| ITEM | NAME | SETTING | INPUT SIGNAL | TEST POIN | MEASURING INSTRUMENT | ADJUSTMENT METHOD | ADJUSTMENT SPEC |
|---|---|---|---|---|---|---|---|
| VCEN | VERTICAL Raster centeing Adjustment | CONTRAST :MAX<br>BRIGHTNESS:CNT<br>COLOR :CNT<br>TINT :CNT | Retma Signal | Between TP-G to TP-V | Digital Volt Meter | Adjust the vdtagebetwen TP-G and TP-V. | 0±10 mV |
| DY Tilt Adjustment | | CONTRAST: MAX<br>BRIGHTNESS:CNT<br>COLOR :CNT<br>TINT :CNT<br>PIC SIZE :FULL | D-Cross Pattern | Picture Adjustment | Picture Adjustment | After roughly the green centering magnet alignment, adjust the green yoke so that the D-cross is as close as possible to the dummy screen cross. Adjust the Red and Blue in the same manner as Green. | The dummy screen cross and D-cross Gap ± 5mm. |
| Centering magnet Adjustment | | CONTRAST: MAX<br>BRIGHTNESS:CNT<br>COLOR :CNT<br>TINT :CNT<br>PIC SIZE :FULL | Retma Signal | Picture Adjustment | Picture Adjustment | Adjust the green center to the screen center with the centering magnet on Retma signal. And adjust the Red and Blue center to the green center each. | Color gap at the screen center is within ± 3mm. |
| WID | Horizontal Adjustment (FULL) | CONTRAST :MAX<br>BRIGHTNESS:CNT<br>COLOR :CNT<br>TINT :CNT<br>PIC SIZE : FULL<br>C-MUTE :ON | Retma Signal | Picture Adjustment | Picture Adjustment | Adjust the Horizontal width by WID on the green raster only.<br>After finishing Convergence adjustment, make sure that the width is the same as the spec. | 11 ± 1 bar<br>In case of C-MUTE OFF is the same spec as well. |
| HIT (VLIN) | Vertical Adjustment (FULL) | CONTRAST :MAX<br>BRIGHTNESS: CNT<br>COLOR :CNT<br>TINT :CNT<br>PIC SIZE : FULL<br>C-MUTE : ON | Retma Signal | Picture Adjustment | Picture Adjustment | Adjust the Vertical height by HIT(VLIN) on the green raster only.After finishing Convergence adjustment, make sure that the height is the same as the spec with C-MUTE OFF. | In case of Convergence mute.<br>Upper left...5 ± 0.5 bar<br>Bottom right...5 ± 0.5 bar<br>In case of C-MUTE OFF.<br>Upper left...4 ± 0.5 bar<br>Bottom right...4 ± 0.5bar. |
| Convergence | | | Retma Signal | Picture Adjustment | Picture Adjustment | Refer to the following (Convergence Net Geometry) | |

**CONVERGENCE (46 / 51 / 57 WIDE)**

Net Pattern Geometry



| Model | 46WIDE | 51WIDE | 57WIDE |
|---|---|---|---|
| V size | 572.850 | 635.085 | 708.750 |
| | 278.4 | 308.0 | 344.0 |
| | 208.8 | 231.0 | 258.0 |
| | 104.4 | 115.5 | 129.0 |
| | 0.0 | 0.0 | 0.0 |
| | 104.4 | 115.5 | 129.0 |
| | 208.8 | 231.0 | 258.0 |
| | 278.4 | 308.0 | 344.0 |
| V span | 34.8 | 38.5 | 43.0 |

| Model | H size | | | | | | | | | | H span |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 46WIDE | 1018.4 | 485.0 | 404.1 | 242.5 | 80.8 | 0.0 | 80.8 | 242.5 | 404.1 | 485.0 | 80.8 |
| 51WIDE | 1129.0 | 537.6 | 448.0 | 268.8 | 89.6 | 0.0 | 89.6 | 268.8 | 448.0 | 537.6 | 89.6 |
| 57WIDE | 1260.0 | 600.0 | 500.0 | 300.0 | 100.0 | 0.0 | 100.0 | 300.0 | 500.0 | 600.0 | 100.0 |

UNIT: mm

**NOTES**

In many cases, color misconvergence may be corrected by returning HIT and WID data in main deflection side to initial adjusting values. Following cases will surely require readjustment of convergence.

**CRT REPLACEMENT**

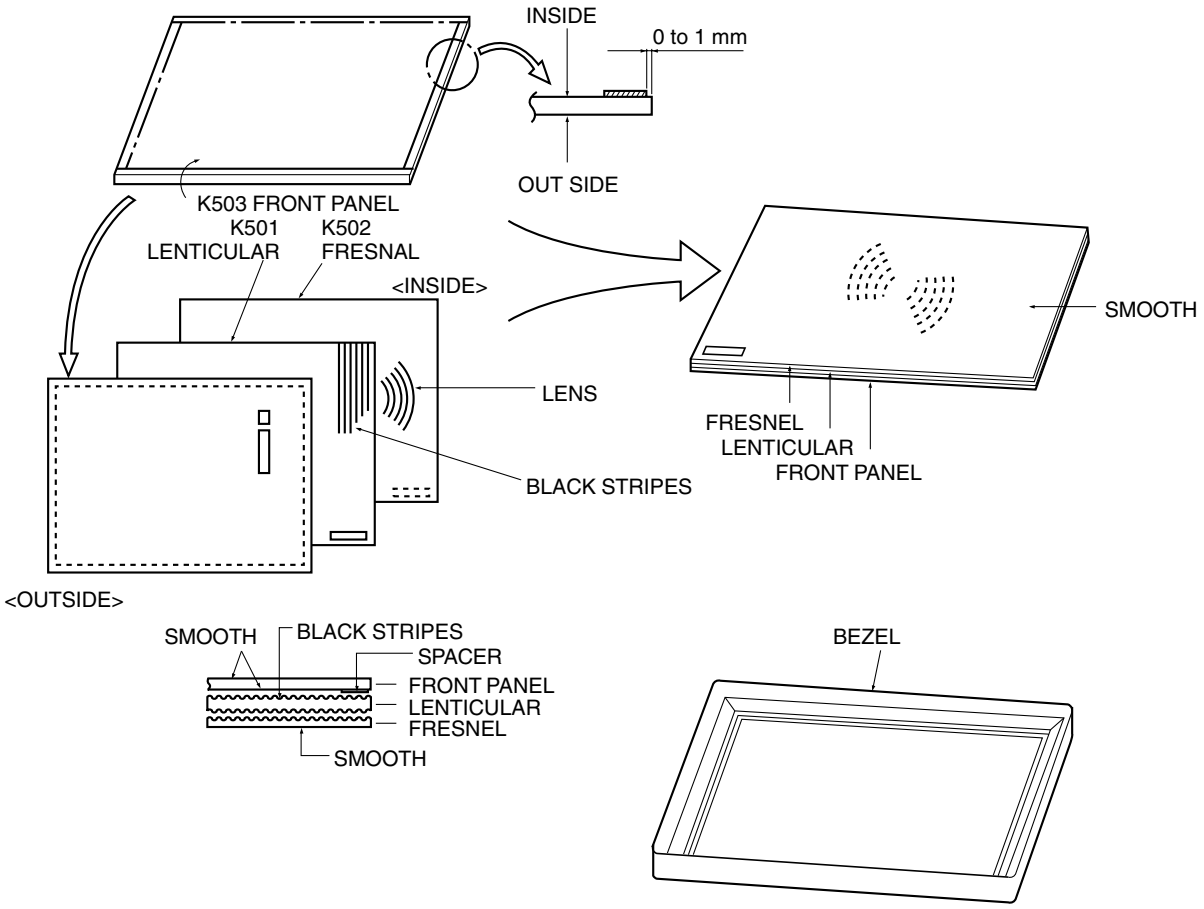
When CRT is replaced, main deflection readjustment and color matching are required.
Perform following procedures.

1. Replace two CRT's of blue and red.
2. Perform horizontal adjustment for blue and red yokes on base of green CRT data. Mount yoke and velocity mod. coil alignment, pushing towards CRT without gap.
3. Adjust alignment of blue and red. (Refer Alignment adjustment for details.)
4. Rotating centering magnet, adjust CRT centers of red and blue to CRT center of green.
   (Picture position adjustment)
5. Adjust HIT and WID data of main deflection, and decide data at the most precise screen comparing to green data.
6. Adjust convergence of screen picture for color matching. Do not move green one at this time.
7. After convergence adjustment of screen picture finishes, replace green CRT.
   For green CRT as well, repeat steps 2 to 5 above on bases of red and blue color matching to adjust convergence.
8. Execute TOUCH FOCUS following instructions displayed on the screen after finishing convergence adjustments of all the colors.
   Note: Press button "7" again after "PLEASE PUSH TOUCH FOCUS" has been displayed. Then, TOUCH FOCUS will not be executed, and the current state of convergence will be displayed.

# SCREEN AND MIRROR ALIGNMENTS

**ASSEMBLING OF FRONT SCREEN**

**MOUNTING OF FRONT SCREEN**




**CAUTION :** Do not hold the optical system parts (lens and mirror) with bare hand to avoid finger-prints on the surface of those parts.

**HOW TO CLEAN LENS AND MIRROR**

1. Be sure to remove sand dust with an air brush, etc.
2. When it is stained slightly, breathe upon it and wipe away with the specified cleaning cloth.
   For other stains than the above, wipe the stains away with the specified cloth into which a cleaning liquid has been soaked.

Cleaning liquid..... **LENS LUSTER** (Manufactured by Edmund Scientific Co.), etc.

**HOW TO CLEAN SCREEN**

When cleaning the screen, use a soft cloth so as not to damage the screen.

1. Wipe the screen with a dry cloth to remove moisture on the screen.

**Note :** Absolutely do not use detergent, water, alcohol, benzine, thinner, etc. for cleaning in order not to wipe away the black print on the surface.

# CIRCUIT CHECKS

**HIGH VOLTAGE CHECK**

**CAUTION:** There is no HIGH VOLTAGE ADJUSTMENT on this chassis. Checking should be done following the steps below.

1. Connect an accurate high voltage meter to the anode of the picture tube.
2. Turn on the receiver. Set the BRIGHTNESS and CONTRAST to minimum (zero beam current).
3. High voltage must be measured below (B) kV.
   Refer to table-1 for high voltage (B).
   (See SETTING & ADJUSTING DATA on page 20)
4. Vary the BRIGHTNESS to both extremes to be sure the high voltage does not exceed the limit under any conditions.

**CAUTION:**

When the following parts fail, check the High Voltage after replacing.

| Location No. | Name | Descriptions |
|---|---|---|
| | | 46", 51", 57" |
| T461 | Flyback | TFB3094AS |
| C440 | Capacitor | 1000pF, ±3% |
| C443 | Capacitor | 4700pF, ±3% |
| C444 | Capacitor | 3600pF, ±3% |
| C467 | Capacitor | 5600pF, ±5% |
| C468 | Capacitor | 6800pF, ±5% |

**ANODE VOLTAGE MEASURING METHOD**

CAUTION: Take extra precaution when measuring this high voltage. High voltages are also present in surrounding circuit boards (CRT DRIVE assembly, DEFLECTION assembly, and POWER SUPPLY assembly).

1. Disconnect the FBT anode cable as outlined below. Measure high voltage at the point where the cable enters the FBT.
2. Holding the rubber cover firmly, turn it counterclockwise and check that the lock has been disengaged. (See Fig. b on page 9.)
3. Determine the extent of the rubber cover before disconnecting the cable.
4. Pull straight up the anode cable to disconnect.
5. When reconnecting the cable, proceed in the reverse order. After reconnecting, tug on the cable to check that it is secure.

**FS CIRCUIT CHECK**

The Fail Safe (FS) circuit check is indispensable for the final check in servicing. Checking should be done following the steps below.

1. Turn the receiver on.
2. Temporarily short TP- (R) and TP- (X) on the DEF/POWER Board with a jumper wire.
   Raster and sound will disappear.
3. The receiver must remain in this state even after removing the jumper wire. This is the evidence that the FS circuit is functioning properly.
4. To obtain a picture again, temporarily turn the receiver off and allow the FS circuit more than 5 seconds to reset. Then turn the receiver on to produce a normal picture.

# CHAPTER 2 SPECIFIC INFORMATIONS

## SETTING & ADJUSTING DATA

### 【SAFETY INSTRUCTIONS】

| | | 46", 51", 57" |
|---|---|---|
| HIGH VOLTAGE AT ZERO BEAM: | (A) | 32.8 kV |
| MAX HIGH VOLTAGE: | (B) | 33.9 kV |

Table-1

### 【SERVICE MODE】

**ADJUSTING ITEMS AND DATA IN THE SERVICE MODE:**

| Item | Name of adjustment | Preset | Data |
|---|---|---|---|
| RCUT | R CUT OFF | 80H | ← |
| BCUT | B CUT OFF | 80H | ← |
| RDRV | R DRIVE | 40H | ← |
| BDRV | B DRIVE | 40H | ← |
| BRTC | BRIGHT CENTER | 80H | ← |
| HIT | PICTURE HIT | 30H | ← |
| LIN | V LINEARITY | 12H | ← |
| VSC | V S CORRECTION | 29H | ← |
| WID | PICTURE WIDTH | 48H | ← |

| Item | Name of adjustment | Preset | Data |
|---|---|---|---|
| COLC | COLOR CENTER | 5DH | ← |
| VCP | V COMPENSATION | 06H | ← |
| PARA | EW PARABOLA | 0FH | ← |
| CNR | EW M CORRECTION | 10H | ← |
| HCP | H COMPENSATION | 00H | ← |
| VFC | V f CORRECTION | 00H | ← |
| VCEN | V CENTERRING | 7AH | ← |
| TVOP | TV OPTION | 40H | ← |
| | | | |

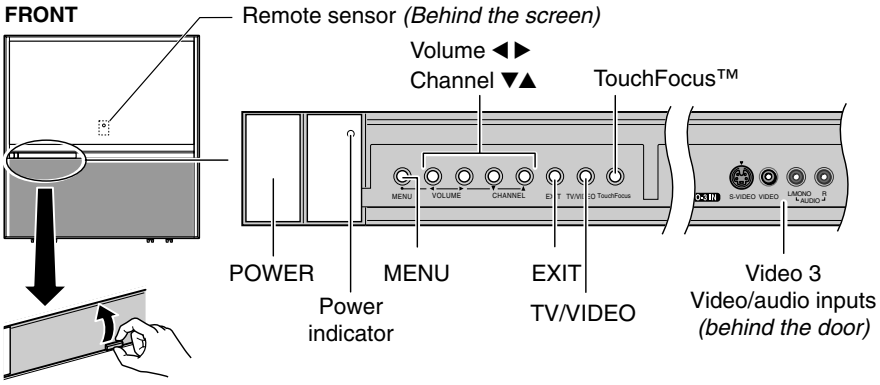
**Table-2**

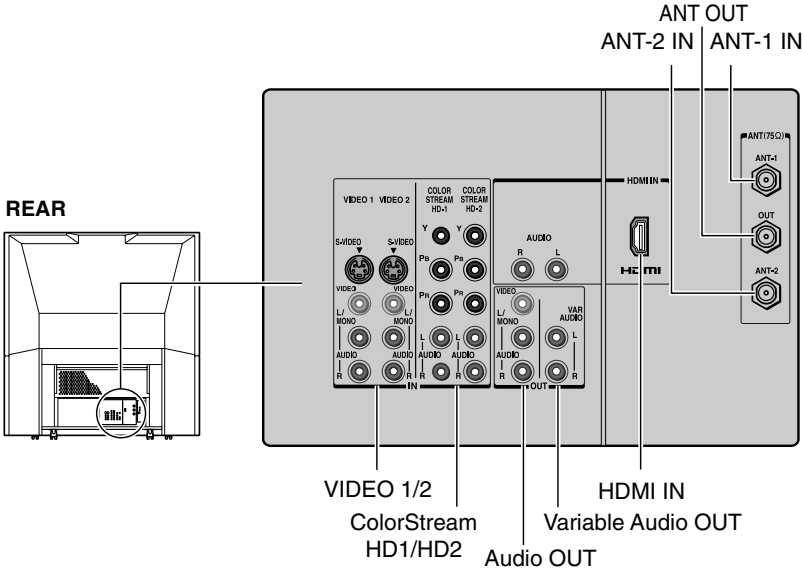
### 【CIRCUIT CHECKS】

| | | |
|---|---|---|
| HIGH VOLTAGE DET | Q306 #⑧pin-GND | 9.0 V |

**Table-3**

# LOCATION OF CONROLS (Representative:57H84)



## Learning about the remote control

The buttons used for operating the TV only are described here.

**POWER** turns the TV on and off

**RECALL** displays screen information

**SLEEP** sets the TV to turn off at a specific time

**TV/VIDEO** selects video input source

**MUTE** mutes the sound

**Device Switch** switches between TV, CBL/SAT/VCR, and DVD)
Set to "TV" to control the TV.

**CH (channel) ▲▼** cycles through programmed channels

**Channel Numbers** (0-9, 100) allow direct access to channel

**VOL (volume) ▲▼** adjusts the volume level

**CH RTN** returns to the memorized channel

**MENU** allows access to on-screen programming menus

**ENTER** activates the function settings in the menu

**▲▼◄►** select or adjust programming menus

**POP CH ▲▼** selects the POP (picture-out-picture) channel

**FAV ▲▼** cycles through favorite channels

**FAVORITE** allows access to the favorite channel search function

**PIC SIZE** cycles through the five picture sizes: Natural, Theater Wide 1, 2, 3, and Full

**EXIT** exits programming menus

**SPLIT** turns the POP feature on and off

**SOURCE** selects the POP picture source

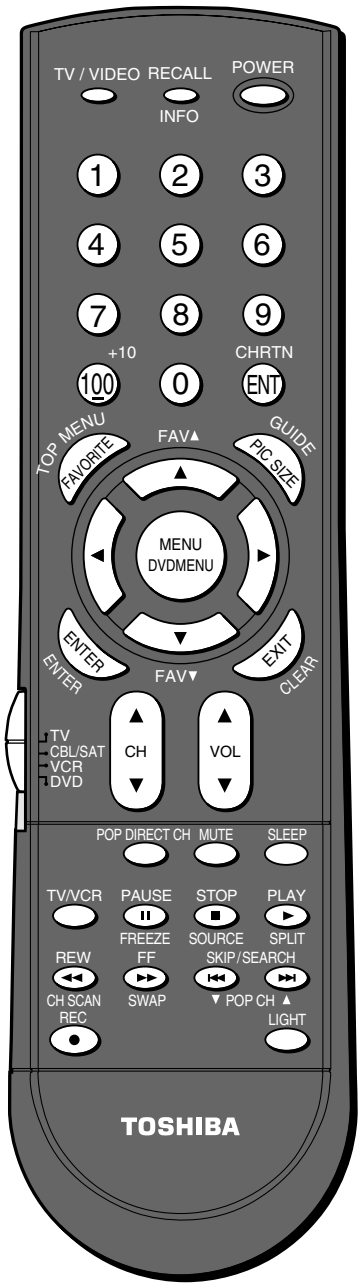
**FREEZE** freezes the picture. Press again to restore the picture.

**SWAP** switches the main and POP pictures

**POP DIRECT CH** allows direct access to POP channels

**CH SCAN** allows access to the programmed channel search function

**LIGHT** illuminates the keypad for five seconds




***Note:***
*The error message "Not Available" will appear if you press a key for a function that is not available.*

# ADDING CHANNELS TO THE TV'S MEMORY

When you When you press Channel▲or▼, your TV will stop only on the channels stored in the TV's channel memory. Follow the steps below and on the next page to program all active channels into the TV's memory.

## Programming channels automatically

Your TV can automatically detect all active channels in your area and store them in its memory. After the channels are stored automatically, you can manually add or erase individual channels. To program channels automatically:

**1** Press MENU, and then press ◀ or ▶ until the SET UP menu appears.

**2** Press▲or▼until the TV/CABLE is highlighted, and then press ENTER to display the pull-down menu.

**3** Press▲or▼to highlight either TV or CABLE, depending on which you use. If you use an antenna, highlight TV; if you use cable, highlight CABLE.

**4** Press ENTER.

**5** Press▼to select CH PROGRAM.

**6** Press ENTER to start channel programming. The TV will automatically cycle through all the TV or Cable channels (depending on which you selected), and store all active channels in the channel memory.
While the TV is cycling through the channels, the message "Programming Now—Please Wait" appears.

**7** When channel programming is complete,the message "Completed" appears.

**8** Press Channel▲or▼to view the programmed channels.

Note:
To tune the TV to a channel not programmed in the channel memory, you must use the Channel Number buttons on the remote control.

## Adding and erasing channels manually

After you have programmed the channels automatically, you can manually add or erase specific channels.
To add or erase channels:

**1** Select the channel you want to add or erase. If you are adding a channel, you must select the channel using the Channel Number buttons.

**2** Press MENU, and then press ◀ or ▶ until the SET UP menu appears.

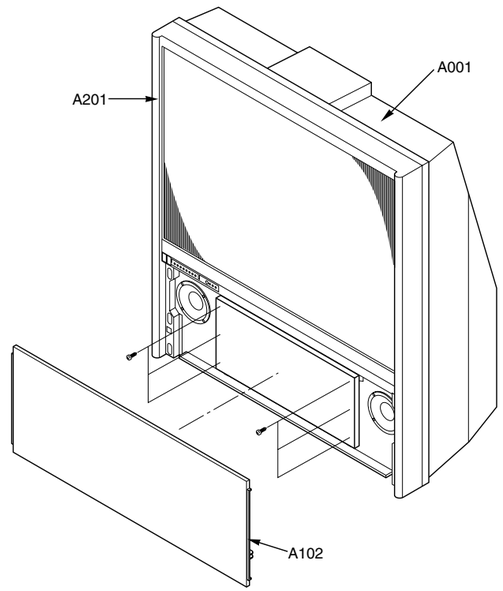
**3** Press ▲or▼ to highlight ADD/ERASE, and then press ENTER to display the pull-down menu.

**4** Press▲or▼to select ADD or ERASE, depending on the function you want to perform.

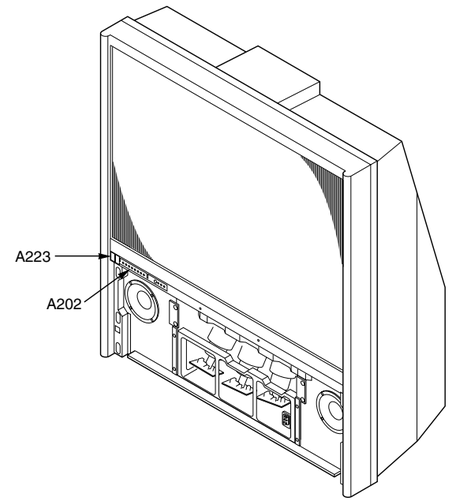
**5** Repeat steps 1-4 for other channels you want to add or erase.

# MECHANICAL DISASSEMBLY

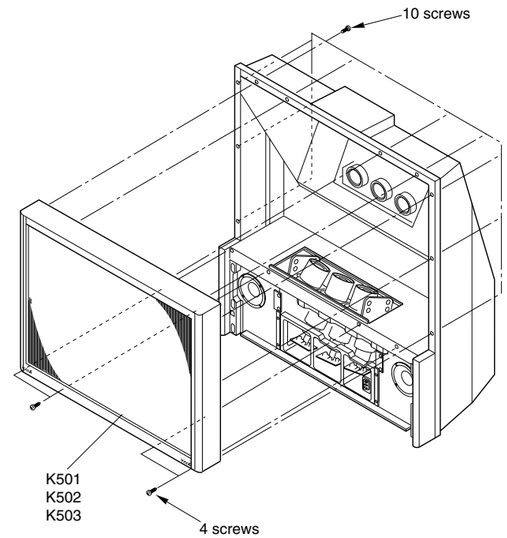
### 1 Speaker Grille Removal



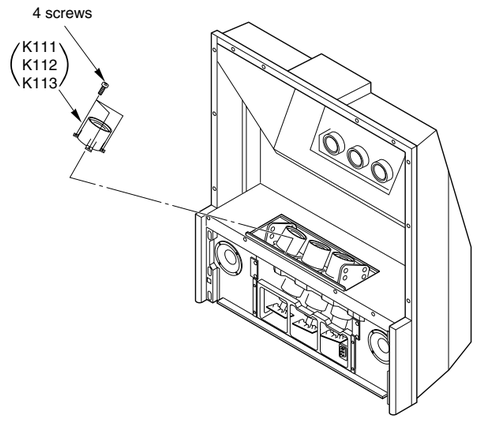

### 2 Control Panel Removal



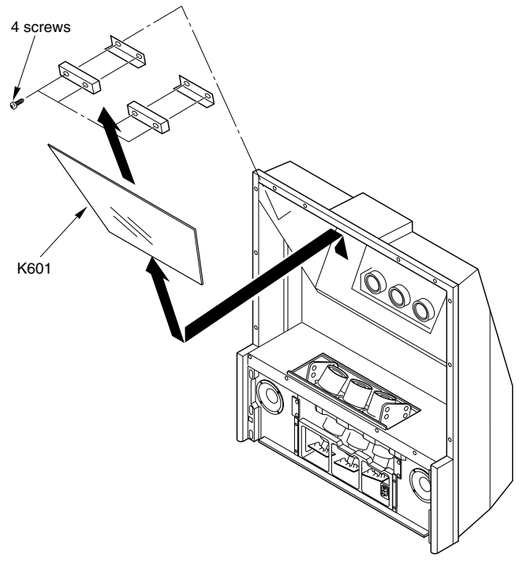

### 3 Front Mask Removal



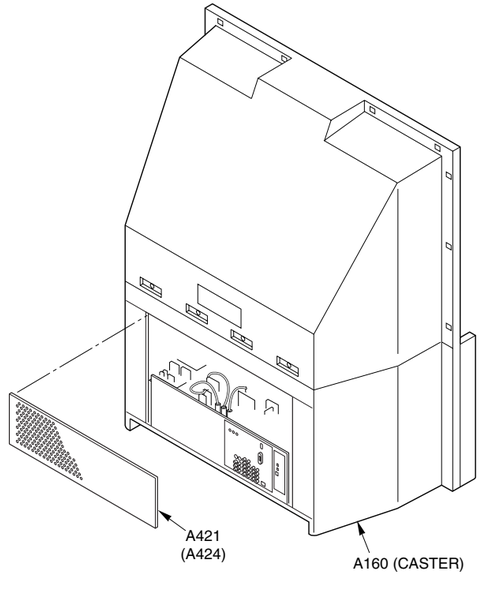

### 4 Shield Plate, Lens Removal




### 5 Mirror Removal




### 6 Back Board Removal



# CHASSIS AND CABINET REPLACEMENT PARTS LIST

**WARNING**: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON PAGE 3 OF THIS MANUAL.

**CAUTION**: The international hazard symbols "⚠" in the schematic diagram and the parts list designate com-ponents which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

*NOTICE:*
- *The part number must be used when ordering parts, in order to assist in processing, be sure to include the Model number and Description.*
- *The PC board assembly with * mark is no longer available after the end of the production.*

**Model : 46H84/51H84/57H84**

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Capacitors ..... | CD | : | Ceramic Disk | PF | : | Plastic Film | EL | : Electrolytic |
| Resistors ..... | CF | : | Carbon Film | CC | : | Carbon Composition | MF | : Metal Film |
| | OMF | : | Oxide Metal Film | VR | : | Variable Resistor | FR | : Fusible Resistor |

(All CD and PF capacitors are ±5%, 50V and all resistors, ±5%, 1/6W unless otherwise noted.)

| Location No. | Parts No. | Description |
|---|---|---|
| **#1:[46H84]** | | |
| **#2:[51H84]** | | |
| **#3:[57H84]** | | |
| **CAPACITORS** | | |
| C101 | 24797339 | ELECTROLYTIO CE04G, 50V 3.3UF M |
| C102 | 24665221 | ELECTROLYTIC CE04Q, 10V 220UF M 3A |
| C105 | 24100102 | CERAMIC CHIP, 50V F 1000PF Z |
| C106 | 24669479 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C107 | 24666221 | ELECTROLYTIC 04Q, 16V 220UF M 3A |
| C108 | 24665221 | ELECTROLYTIC CE04Q, 10V 220UF M 3A |
| C109 | 24100104 | CERAMIC CHIP, 25V F 0.1UF Z |
| C110 | 24794101 | ELECTROLYTIC, 16V 100UF M |
| C221 | 24503041 | PLASTIC FILM , 63V 0.1UF J |
| C301 | 24503053 | PLASTIC FILM, 63V 1UF J |
| C302 | 24669010 | ELECTROLYTIC, 50V 1UF M 3A |
| C303 | 24503053 | PLASTIC FILM, 63V 1UF J |
| C308 | 24567223 | PLASTIC FILM, 50V 0.022UF J |
| C309 | 24109102 | CERAMIC CHIP, 50V B 1000PF K |
| C310 | 24073053 | ELECTROLYTIC, 25V 100UF M 3A |
| C311 | 24109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C312 | 24109332 | CERAMIC CHIP, 50V B 3300PF K |
| C314 | 24503037 | MT PLA CAP 63V 0.047UF J |
| C315 | 24073020 | ELECTROLYTIC, 10V 1000UF M 3A |
| C320 | 24669101 | ELECTROLYTIC, 50V 100UF M 3A |
| C321 | 24669101 | ELECTROLYTIC, 50V 100UF M 3A |
| C323 | 24109473 | CERAMIC CHIP, 25V B 0.047UF K |
| C324 | 24503053 | PLASTIC FILM, 63V 1UF J |
| C325 | 24082057 | PLASTIC FILM, 100V 0.22UF J |
| C327 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C328 | 24082256 | PLASTIC FILM, 100V 2200PF J |
| C330 | 24073034 | ELECTROLYTIC, 16V 10UF M 3A |
| C332 | 24669101 | ELECTROLYTIC, 50V 100UF M 3A |
| C333 | 24082272 | PLASTIC FILM, 100V 0.047UF J |
| C334 | 24109471 | CERAMIC CHIP, 50V B 470PF K |
| C338 | 24666100 | ELECTROLYTIC, 10V 10UF M 3A |
| C340 | 24073037 | ELECTROLYTIC, 16V 47UF M 3A |
| C361 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C362 | 24109473 | CERAMIC CHIP, 25V B 0.047UF K |
| C370 | 24669229 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C371 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |

| Location No. | Parts No. | Description |
|---|---|---|
| C401 | 24214332 | CERAMIC DISC, 500V B 3300PF K |
| C402 | 24214391 | CERAMIC DISC, 500V B 390PF K |
| C405 | 24503041 | PLASTIC FILM , 63V 0.1UF J |
| C412 | 24828124 | PLASTIC FILM, 200V 0.12UF J |
| C415 | 24092484 | CERAMIC DISC, 2KV B 1500PF K |
| C416 | 24676220 | ELECTROLYTIC, 04Q 100V 22UF M 3A |
| C417 | 24503334 | PLASTIC FILM CF92 T 250V 1R5UF J |
| C419 | 24105331 | CERAMIC CHIP, 50V CH 330PF J |
| C420 | 24503041 | PLASTIC FILM , 63V 0.1UF J |
| C422 | 24109102 | CERAMIC CHIP, 50V B 1000PF K |
| ⚠C423 | 24503252 | PLASTIC FILM, 400V 0.3UF J |
| ⚠C425 | 24503142 | PLASTIC FILM, 400V 0.27UF J |
| C426 | 24211222 | CERAMIC DISC, 2KV B 2200PFK |
| C432 | 24567333 | PLASTIC FILM, 50V 33000PF J |
| ⚠C440 | 24503059 | PLASTIC FILM, 1800VH 1000PF H |
| ⚠C443 | 24503099 | PLASTIC FILM, 1800VH 4700PF H |
| ⚠C444 | 24503347 | PLASTIC FILM, 1800VH 3600PF H |
| C445 | 24828473 | PLASTIC FILM, 200V 0.047UF J |
| C446 | 24073120 | ELECTRPLYTIC, 250V 33UF, 250YXF33M |
| C448 | 24073118 | ELECTROLYTIC, 160V 33UF M |
| C449 | 24214221 | CERAMIC DISC, 500V B 220PF K |
| C450 | 24073057 | ELECTROLYTIC, 25V 1000UF M 3A |
| C460 | 24678220 | ELECTROLYTIC, 200V 22UF M |
| C463 | 24109682 | CERAMIC CHIP, 50V B 6800PF K |
| C464 | 24503149 | PLASTIC FILM, 250V 3.3UF |
| ⚠C467 | 24820562 | PLASTIC FILM, 630V 5600PF J |
| ⚠C468 | 24820682 | PLASTIC FILM, 630V 6800PF J |
| C473 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C481 | 24092784 | CERAMIC CHIP CK83B 10V 0.33UF K |
| C482 | 24109822 | CERAMIC CHIP, 50V B 8200PF K |
| C483 | 24105470 | CERAMIC CHIP, 50V CH 47PF J |
| C491 | 24666100 | ELECTROLYTIC, 10V 10UF M 3A |
| C496 | 24503049 | PLASTIC FILM, 63V 0.47UF J |
| C497 | 24085022 | ELEC. NONPOLAR CE04R 16V 100UF M NP 3A |
| C499 | 24666220 | ELECTROLYTIC, 16V 22UF M 3A |
| C601 | 24109681 | CERAMIC CHIP, 50V B 680PF K |
| C602 | 24109681 | CERAMIC CHIP, 50V B 680PF K |
| C603 | 24073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C604 | 24073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C605 | 24073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C606 | 24073084 | ELECTROLYTIC, 50V 4.7UF M 3A |

| Location No. | Parts No. | Description |
|---|---|---|
| C607 | 24073053 | ELECTROLYTIC, 25V 100UF M 3A |
| C608 | 24073086 | ELECTROLYTIC, 50V 10UF M 3A |
| C612 | 24073039 | ELECTROLYTIC, 16V 220UF M 3A |
| C661 | 24073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C662 | 24073086 | ELECTROLYTIC, 50V 10UF M 3A |
| C663 | 24073086 | ELECTROLYTIC, 50V 10UF M 3A |
| C665 | 24109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C666 | 24073084 | ELECTROLYTIC, 50V 4.7UF M 3A |
| C667 | 24794100 | ELECTROLYTIC, 16V 10UF M |
| C680 | 24073073 | ELECTROLYTIC, 35V 2200UF M 3A |
| C681 | 24109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C682 | 24073082 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C683 | 24795101 | ELECTROLYTIC, 25V 100UF M |
| C684 | 24795470 | ELECTROLYTIC 04G, 25V 47UF M |
| ⚠C801 | 24503004 | PLASTIC FILM, AC275V 0.47UF M |
| C805 | 24092281 | CERAMIC DISC, AC250V E 4700PF |
| C809 | 24086067 | ELECTROLYTIC 692Q 200V 1000UF M 3F |
| C810 | 24086067 | ELECTROLYTIC 692Q 200V 1000UF M 3F |
| ⚠C811 | 24092595 | CERAMIC DISC, AC250V E 2200PF M |
| ⚠C812 | 24092595 | CERAMIC DISC, AC250V E 2200PF M |
| ⚠C814 | 24092579 | CERAMIC DISC, AC250V 470PF K |
| C840 | 24679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C841 | 24073097 | ELECTROLYTIC CE04P 10V 2200UF M 3A |
| C842 | 24503041 | PLASTIC FILM , 63V 0.1UF J |
| C843 | 24092333 | CERAMIC DISC, 2KV 100PF K |
| C845 | 24669229 | ELECTROLYTIC, 50V 2.2UF M 3A |
| C849 | 24073038 | ELECTROLYTIC, 16V 100UF M 3A |
| C850 | 24073187 | ELECTROLYTIC CE04P 35V 560UF M 3A |
| C851 | 24073187 | ELECTROLYTIC CE04P 35V 560UF M 3A |
| C852 | 24073169 | ELECTROLYTIC CE04P 25V 470UF M 3A |
| C853 | 24073169 | ELECTROLYTIC CE04P 25V 470UF M 3A |
| C854 | 24667470 | ELECTROLYTIC CE04Q, 25V 47UF M 3A |
| C860 | 24214103 | CERAMIC DISC, 500V B 0.01UF K |
| C862 | 24092341 | CERAMIC DISC, 2KV R 470PF K |
| C863 | 24503045 | PLASTIC FILM, 63V 0.22UF J |
| C866 | 24503053 | PLASTIC FILM, 63V 1UF J |
| C867 | 24591472 | PLASTIC FILM, 50V 4700PF J |
| C868 | 24669470 | ELECTROLYTIC, 50V 47UF M 3A |
| C869 | 24678229 | ELECTROLYTIC, 200V 2.2UF M 3A |
| C870 | 24503565 | PLASTIC FILM CQ32 T 800V 100000PF H |
| C871 | 24092343 | CERAMIC DISC, 2KV 680PF K |
| C873 | 24503045 | PLASTIC FILM, 63V 0.22UF J |
| C874 | 24092337 | CERAMIC DISC, 2KV 220PF K |
| C876 | 24503049 | PLASTIC FILM, 63V 0.47UF J |
| C877 | 24092344 | CERAMIC DISC, 2KV 820PF K |
| C879 | 24214102 | CERAMIC DISC, 500V B 1000PF K |
| C880 | 24092339 | CERAMIC DISC, 2KV 330PF K |
| C881 | 24092339 | CERAMIC DISC, 2KV 330PF K |
| C884 | 24086916 | ELECTROLYTIC, 160V 330UF M 3D |
| C885 | 24668102 | ELECTROLYTIC, 35V 1000UF M 3A |
| C888 | 24503045 | PLASTIC FILM, 63V 0.22UF J |
| C891 | 24073155 | ELECTROLYTIC CE04P 16V 1000UF M 3A |
| C892 | 24073155 | ELECTROLYTIC CE04P 16V 1000UF M 3A |
| C893 | 24073141 | ELECTROLYTIC CE04P 10V 1000UF M 3A |
| C898 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C901 | 24211102 | CERAMIC DISC, 2KV B 1000PF K |
| C902 | 24794101 | ELECTROLYTIC, 16V 100UF M |
| C903 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C904 | 24109471 | CERAMIC CHIP, 50V B 470PF K |
| C906 | 24679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C907 | 24214101 | CERAMIC DISC, 500V B 100PF K |
| C911 | 24211102 | CERAMIC DISC, 2KV B 1000PF K |
| C912 | 24794101 | ELECTROLYTIC, 16V 100UF M |
| C913 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C914 | 24109471 | CERAMIC CHIP, 50V B 470PF K |
| C915 | 24679220 | ELECTROLYTIC, 250V 22UF M 3A |

| Location No. | Parts No. | Description |
|---|---|---|
| C917 | 24214101 | CERAMIC DISC, 500V B 100PF K |
| C921 | 24211102 | CERAMIC DISC, 2KV B 1000PF K |
| C922 | 24794101 | ELECTROLYTIC, 16V 100UF M |
| C923 | 24109471 | CERAMIC CHIP, 50V B 470PF K |
| C924 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| C925 | 24679220 | ELECTROLYTIC, 250V 22UF M 3A |
| C926 | 24214101 | CERAMIC DISC, 500V B 100PF K |
| C934 | 24092731 | CERAMIC CHIP, 16V B 1UF K |
| C944 | 24092731 | CERAMIC CHIP, 16V B 1UF K |
| C954 | 24092731 | CERAMIC CHIP, 16V B 1UF K |
| C961 | 24763101 | ELECTROLYTIC, 16V 100UF M |
| C962 | 24203100 | ELECTORLYTIC, 16V 10UF M 7L 3A |
| C4430 | 24073034 | ELECTROLYTIC, 16V 10UF M 3A |
| C7101 | 24797470 | ELECTROLYTIC 04G, 50V 47UF M |
| C7102 | 24109103 | CERAMIC CHIP, 50V B 0.01UF K |
| C7103 | 24206479 | ELECTROLYTIC, 50V 4.7UF M 7L 3A |
| C7104 | 24108330 | CERAMIC CHIP, 50V SL 33PF J |
| C7105 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7106 | 24797470 | ELECTROLYTIC 04G, 50V 47UF M |
| C7107 | 24790470 | ELECTROLYTIC, 160V 47UF M |
| C7108 | 24214472 | CERAMIC DISC, 500V B 4700PF K |
| C7109 | 24214472 | CERAMIC DISC, 500V B 4700PF K |
| C7110 | 24666470 | ELECTORLYTIC CE04Q, 16V 47UF M 3A |
| C7111 | 24666470 | ELECTORLYTIC CE04Q, 16V 47UF M 3A |
| C7112 | 24435560 | CERAMIC DISC, 500V SL 56PF J |
| C7113 | 24790100 | ELECTROLYTIC, 160V 10UF M |
| C7114 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7701 | 24503047 | PLASTIC FILM, 63V 0.33UF J |
| C7704 | 24073053 | ELECTROLYTIC, 25V 100UF M 3A |
| C7705 | 24073037 | ELECTROLYTIC, 16V 47UF M 3A |
| C7706 | 24503047 | PLASTIC FILM, 63V 0.33UF J |
| C7722 | 24105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7724 | 24073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7725 | 24073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7727 | 24105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7730 | 24105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7733 | 24105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7735 | 24073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7736 | 24073091 | ELECTROLYTIC, 50V 220UF M 3A |
| C7738 | 24105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7741 | 24105331 | CERAMIC CHIP, 50V CH 330PF J |
| C7750 | 24073015 | ELECTROLYTIC, 10V 47UF M 3A |
| C7751 | 24073089 | ELECTROLYTIC, 50V 47UF M 3A |
| C7752 | 24073089 | ELECTROLYTIC, 50V 47UF M 3A |
| C7753 | 24073093 | ELECTROLYTIC, 50V 470UF M 3A |
| C7761 | 24073015 | ELECTROLYTIC, 10V 47UF M 3A |
| C7762 | 24073015 | ELECTROLYTIC, 10V 47UF M 3A |
| C7765 | 24667220 | ELECTROLYTIC, 25V 22UF M 3A |
| C7784 | 24667220 | ELECTROLYTIC, 25V 22UF M 3A |
| C7785 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7786 | 24092730 | CERAMIC CHIP, 16V B 0.1UF K |
| C7800 | 24666220 | ELECTROLYTIC, 16V 22UF M 3A |
| CB01 | 24794470 | ELECTROLYTIC, 16V 47UF M |
| CV14 | 24212102 | CERAMIC DISC, 50V B 1000PF K |
| CV27 | 24762471 | ELECTROLYTIC, 04G 10V 470UF M |
| CV29 | 24763101 | ELECTROLYTIC, 16V 100UF M |
| CV30 | 24232103 | CERAMIC DISC, 50V F 0.01UF Z |
| CV38 | 24212102 | CERAMIC DISC, 50V B 1000PF K |
| CV39 | 24212102 | CERAMIC DISC, 50V B 1000PF K |
| CY102 | 24665221 | ELECTROLYTIC CE04Q, 10V 220UF M 3A |
| CY105 | 24100102 | CERAMIC CHIP, 50V F 1000PF Z |
| CY160 | 24815393 | CERAMIC CHIP, 50V B 39000PF K |

| Location No. | | Parts No. | Description |
|---|---|---|---|
| **RESISTORS** | | | |
| R101 | | 24382223 | OXIDE METAL FILM, 1W 22K OHM J |
| R150 | | 24011332 | CHIP, METAL FILM, 1/20W 3.3K OHM J |
| R151 | | 24011562 | CHIP, METAL FILM, 1/20W 5.6K OHM J |
| R152 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R173 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R174 | #2,#3 | 24011273 | CHIP, METAL FILM, 1/20W 27K OHM J |
| | #1 | 24011273 | CHIP, 1/20W 27K OHM J |
| R240 | | 24367153 | CARBON FILM, 1/6W 15K OHM G |
| R241 | | 24367183 | CARBON FILM, 1/6W 18K OHM G |
| R242 | | 24367183 | CARBON FILM, 1/6W 18K OHM G |
| R243 | | 24367273 | CARBON FILM, 1/6W 27K OHM G |
| R244 | | 24366124 | CARBON FILM, 1/6W 120K OHM J |
| R245 | | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R246 | | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R247 | | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R249 | | 24366104 | CARBON FILM, 1/6W 100K OHM J |
| R264 | | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| R265 | | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| R266 | | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| R286 | | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| R287 | | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| R288 | | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| R302 | | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R305 | | 24322109 | OXIDE METAL FILM, 1W 1 OHM J |
| R306 | | 24011822 | CHIP, METAL FILM, 1/20W 8.2K OHM J |
| R307 | | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R308 | | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R311 | | 24366563 | CARBON FILM, 1/6W 56K OHM J |
| R312 | | 24011123 | CHIP, METAL FILM, 1/20W 12K OHM J |
| R313 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R314 | | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R315 | | 24011681 | CHIP, METAL FILM, 1/20W 680 OHM J |
| R321 | | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R322 | | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R325 | | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R330 | | 24000633 | METAL FILM, 1/4W 10K OHM F |
| R331 | | 24000633 | METAL FILM, 1/4W 10K OHM F |
| R334 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R335 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R336 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R337 | | 24321129 | OXIDE METAL FILM, 1/2W 1.2 OHM J |
| R338 | | 24011153 | CHIP, METAL FILM, 1/2OW 15K OHM J |
| R340 | | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R341 | | 24011183 | CHIP, METAL FILM, 1/20W 18K OHM J |
| R343 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R344 | | 24382151 | OXIDE METAL FILM, 1W 150 OHM J |
| R345 | | 24000445 | CHIP JUMPER, 1608TYPE |
| R346 | | 24382391 | OXIDE METAL FILM, 1W 390 OHM J |
| R348 | | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R349 | #2,#3 | 24011392 | CHIP, METAL FILM, 1/20W 3.9K OHM J |
| | #1 | 24011392 | CHIP, 1/20W 3.9K OHM J |
| R350 | | 24011123 | CHIP, METAL FILM, 1/20W 12K OHM J |
| R355 | | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R360 | | 24011562 | CHIP, METAL FILM, 1/20W 5.6K OHM J |
| R361 | | 24011104 | CHIP, METAL FILM, 1/20W 100K OHM J |
| R362 | | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R363 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R364 | | 24011331 | CHIP, METAL FILM, 1/20W 330 OHM J |
| R365 | | 24011682 | CHIP, METAL FILM, 1/20W 6.8K OHM J |
| R366 | | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R367 | #2,#3 | 24011392 | CHIP, METAL FILM, 1/20W 3.9K OHM J |
| | #1 | 24011392 | CHIP, 1/20W 3.9K OHM J |
| R369 | | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R370 | | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R371 | | 24011823 | CHIP, METAL FILM, 1/20W 82K OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R372 | 24011332 | CHIP, METAL FILM, 1/20W 3.3K OHM J |
| R373 | 24011823 | CHIP, METAL FILM, 1/20W 82K OHM J |
| R374 | 24011104 | CHIP, METAL FILM, 1/20W 100K OHM J |
| R375 | 24011153 | CHIP, METAL FILM, 1/2OW 15K OHM J |
| R376 | 24011333 | CHIP, METAL FILM, 1/20W 33K OHM J |
| R378 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R390 | 24382561 | OXIDE METAL FILM, 1W 560 OHM J |
| R391 | 24382561 | OXIDE METAL FILM, 1W 560 OHM J |
| R392 | 24382561 | OXIDE METAL FILM, 1W 560 OHM J |
| R403 | 24553101 | OXIDE METAL FILM, 1W 100 OHM J |
| R404 | 24011182 | CHIP, METAL FILM, 1/20W 1.8K OHM J |
| R405 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R406 | 24382682 | OXIDE METAL FILM, 1W 6.8K OHM J |
| R407 | 24381100 | OXIDE METAL FILM, 1/2W 10 OHM J |
| R409 | 24555220 | OXIDE METAL FILM, 3W 22 OHM J |
| R410 | 24555220 | OXIDE METAL FILM, 3W 22 OHM J |
| R411 | 24323229 | OXIDE METAL FILM, 2W 2.2 OHM J |
| R412 | 24383153 | OXIDE METAL FILM, 2W 15K OHM J |
| R413 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R414 | 24019259 | FUSIBLE, 1/4W 27 OHM G |
| R415 | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R416 | 24383151 | OXIDE METAL FILM, 2W 150 OHM J |
| R417 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R418 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R419 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R420 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R421 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| R422 | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R423 | 24942102 | CARBON COMPOSITION, 1/2W 1K OHM J |
| R424 | 24376104 | CARBON FILM, 1/2W 10OK OHM J |
| R425 | 24376104 | CARBON FILM, 1/2W 10OK OHM J |
| R426 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R427 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R428 | 24377224 | CARBON FILM, 1W 220K OHM J |
| R429 | 24942102 | CARBON COMPOSITION, 1/2W 1K OHM J |
| R431 | 24383102 | OXIDE METAL FILM, 2W 1K OHM J |
| R432 | 24376274 | CARBON FILM, 1/2W 270K OHM J |
| R433 | 24376274 | CARBON FILM, 1/2W 270K OHM J |
| R434 | 24376274 | CARBON FILM, 1/2W 270K OHM J |
| R435 | 24366332 | CARBON FILM, 1/6W 3.3K OHM J |
| R436 | 24366473 | CARBON FILM, 1/6W 47K OHM J |
| R437 | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R438 | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R439 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R440 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R441 | 24533331 | FUSIBLE, 2W 330 OHM J |
| R443 | 24310109 | OXIDE METAL FILM, 1/2W 1 OHM J |
| R444 | 24322398 | OXIDE METAL FILM, 1W 0.39 OHM J |
| R446 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R447 | 24382473 | OXIDE METAL FILM, 1W 47K OHM J |
| R448 | 24366562 | CARBON FILM, 1/6W 5.6K OHM J |
| R449 | 24366152 | CARBON FILM, 1/6W 1.5K OHM J |
| R466 | 24366433 | CARBON FILM, 1/6W 43K OHM J |
| R467 | 24011221 | CHIP, METAL FILM, 1/20W 220 OHM J |
| R469 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R470 | 24322478 | OXIDE METAL FILM, 1W 0.47 OHM J |
| R471 | 24366224 | CARBON FILM, 1/6W 220K OHM J |
| R472 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R473 | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R474 | 24376393 | CARBON FILM, 1/2W 39K OHM J |
| R475 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R476 | 24011471 | CHIP, METAL FILM, 1/20W 470 OHM J |
| ⚠ R477 | 24998331 | CHIP, METAL FILM, 1/16W 330 OHM D |
| R478 | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R480 | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R481 | 24366103 | CARBON FILM, 1/6W 10K OHM J |

| Location No. | | Parts No. | Description |
|---|---|---|---|
| R482 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R483 | | 24000445 | CHIP JUMPER, 1608TYPE |
| R485 | | 24011681 | CHIP, METAL FILM, 1/20W 680 OHM J |
| R486 | | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R487 | | 24552271 | OXIDE METAL FILM, 1/2W 270 OHM J |
| R488 | | 24552151 | OXIDE METAL FILM, 1/2W 150 OHM J |
| R489 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R490 | | 24552331 | OXIDE METAL FILM, 1/2W 330 OHM J |
| R491 | | 24011222 | CHIP, METAL FILM, 1/20W 2.2K OHM J |
| ⚠ R492 | | 24998102 | CHIP, 1/16W 1K OHM |
| ⚠ R493 | | 24998391 | CHIP, 1/16W 390 OHM |
| ⚠ R494 | | 24998471 | CHIP, 1/16W 470 OHM |
| R495 | | 24011333 | CHIP, METAL FILM, 1/20W 33K OHM J |
| R496 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R497 | | 24011100 | CHIP, METAL FILM, 1/20W 10 OHM J |
| R498 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R499 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R513 | | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| R515 | | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R601 | | 24011822 | CHIP, METAL FILM, 1/20W 8.2K OHM J |
| R602 | | 24011822 | CHIP, METAL FILM, 1/20W 8.2K OHM J |
| R603 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R604 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R609 | | 24011563 | CHIP, METAL FILM, 1/20W 56K OHM J |
| R610 | #2,#3 | 24011273 | CHIP, METAL FILM, 1/20W 27K OHM J |
| | #1 | 24011273 | CHIP, 1/20W 27K OHM J |
| R611 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R612 | | 24011222 | CHIP, METAL FILM, 1/20W 2.2K OHM J |
| R613 | | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R614 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R615 | | 24011104 | CHIP, METAL FILM, 1/20W 100K OHM J |
| R616 | | 24011822 | CHIP, METAL FILM, 1/20W 8.2K OHM J |
| R626 | | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R627 | | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R661 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R662 | | 24011333 | CHIP, METAL FILM, 1/20W 33K OHM J |
| R663 | | 24011822 | CHIP, METAL FILM, 1/20W 8.2K OHM J |
| R665 | | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R666 | | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R667 | | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R668 | | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R671 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R672 | | 24011333 | CHIP, METAL FILM, 1/20W 33K OHM J |
| R673 | | 24011822 | CHIP, METAL FILM, 1/20W 8.2K OHM J |
| R674 | | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R676 | | 24011104 | CHIP, METAL FILM, 1/20W 100K OHM J |
| R677 | | 24011104 | CHIP, METAL FILM, 1/20W 100K OHM J |
| R681 | | 24011222 | CHIP, METAL FILM, 1/20W 2.2K OHM J |
| R682 | | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R683 | | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R684 | | 24011223 | CHIP, METAL FILM, 1/20W 22K OHM J |
| R687 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R688 | | 24011224 | CHIP, METAL FILM, 1/20W 220K OHM J |
| R693 | | 24000445 | CHIP JUMPER, 1608TYPE |
| R697 | | 24553221 | OXIDE METAL FILM, 1W 220 OHM J |
| R698 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R699 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R810 | | 24007061 | CERAMIC COVERED, 2W 1.8 OHM K |
| R818 | | 24011471 | CHIP, METAL FILM, 1/20W 470 OHM J |
| R819 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R840 | | 24552562 | OXIDE METAL FILM, 1/2W 5.6K OHM J |
| R841 | | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R842 | | 24376563 | CARB0N FILM, 1/2W 56K OHM J |
| R843 | | 24376563 | CARB0N FILM, 1/2W 56K OHM J |
| R844 | | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R845 | | 24366102 | CARBON FILM, 1/6W 1K OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R849 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R854 | 24381150 | OXIDE METAL FILM, 1/2W 15 OHM J |
| R860 | 24383473 | OXIDE METAL FILM, 2W 47K OHM J |
| R862 | 24321689 | OXIDE METAL FILM, 1/2W 6.8 OHM J |
| R864 | 24552102 | OXIDE METAL FILM, 1/2W 1K OHM J |
| R865 | 24552390 | OXIDE METAL FILM, 1/2W 39 OHM J |
| R866 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R867 | 24366223 | CARBON FILM, 1/6W 22K OHM J |
| R868 | 24552470 | OXIDE METAL FILM, 1/2W 47 OHM J |
| R870 | 24381151 | OXIDE METAL FILM, 1/2W 150 OHM J |
| R871 | 24382680 | OXIDE METAL FILM, 1W 68 OHM J |
| R873 | 24552100 | OXIDE METAL FILM, 1/2W 10 OHM J |
| R874 | 24366150 | CARBON FILM, 1/6W 15 OHM J |
| R881 | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R883 | 24381102 | OXIDE METAL FILM, 1/2W 1K OHM J |
| R885 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| R893 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R894 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| ⚠ R899 | 24010001 | CARBON FILM, 1/2W 3.9M OHM J |
| R900 | 24000892 | FUSIBLE, 1W 1.2 OHM J |
| R901 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| R903 | 24552101 | OXIDE METAL FILM, 1/2W 100 OHM J |
| R905 | 24872180 | CHIP, 1/16W 18 OHM J |
| R906 | 24872271 | CHIP, 1/16W 270 OHM J |
| R908 | 24872560 | CHIP, 1/16W 56 OHM J |
| R909 | 24872270 | CHIP, 1/16W 27 OHM J |
| R910 | 24322568 | OXIDE METAL FILM, 1W 0.56 OHM J |
| R911 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| R913 | 24552101 | OXIDE METAL FILM, 1/2W 100 OHM J |
| R915 | 24872270 | CHIP, 1/16W 27 OHM J |
| R916 | 24872271 | CHIP, 1/16W 270 OHM J |
| R918 | 24872560 | CHIP, 1/16W 56 OHM J |
| R919 | 24872180 | CHIP, 1/16W 18 OHM J |
| R920 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R921 | 24366331 | CARBON FILM, 1/6W 330 OHM J |
| R923 | 24552101 | OXIDE METAL FILM, 1/2W 100 OHM J |
| R925 | 24872270 | CHIP, 1/16W 27 OHM J |
| R926 | 24872271 | CHIP, 1/16W 270 OHM J |
| R928 | 24872680 | CHIP, 1/16W 68 OHM J |
| R929 | 24872180 | CHIP, 1/16W 18 OHM J |
| R930 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R931 | 24568272 | CERAMIC COVERED G 7W 2.7K J |
| R938 | 24366150 | CARBON FILM, 1/6W 15 OHM J |
| R944 | 24568272 | CERAMIC COVERED G 7W 2.7K J |
| R945 | 24366150 | CARBON FILM, 1/6W 15 OHM J |
| R948 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R950 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R951 | 24568272 | CERAMIC COVERED G 7W 2.7K J |
| R958 | 24366150 | CARBON FILM, 1/6W 15 OHM J |
| R961 | 24872222 | CHIP, 1/16W 2.2K OHM J |
| R962 | 24872182 | CHIP, 1/16W 1.8K OHM J |
| R963 | 24872100 | CHIP, 1/16W 10 OHM J |
| R964 | 24872332 | CHIP, 1/16W 3.3K OHM J |
| R965 | 24872101 | CHIP, 1/16W 100 OHM J |
| R966 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R967 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R968 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R969 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R970 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R971 | 24872152 | CHIP, 1/16W 1.5K OHM J |
| R978 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R987 | 24872101 | CHIP, 1/16W 100 OHM J |
| R988 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R991 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R992 | 24366222 | CARBON FILM, 1/6W 2.2K OHM J |
| R4430 | 24381150 | OXIDE METAL FILM, 1/2W 15 OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R4431 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| R7102 | 24872681 | CHIP, 1/16W 680 OHM J |
| R7103 | 24872102 | CHIP, 1/16W 1K OHM J |
| R7104 | 24872102 | CHIP, 1/16W 1K OHM J |
| R7105 | 24871221 | CHIP, 1/8W 220 OHM J |
| R7106 | 24871221 | CHIP, 1/8W 220 OHM J |
| R7107 | 24872101 | CHIP, 1/16W 100 OHM J |
| R7108 | 24872332 | CHIP, 1/16W 3.3K OHM J |
| R7109 | 24872333 | CHIP, 1/16W 33K OHM J |
| R7110 | 24872273 | CHIP, 1/16W 27K OHM J |
| R7111 | 24872333 | CHIP, 1/16W 33K OHM J |
| R7112 | 24872151 | CHIP, 1/16W 150 OHM J |
| R7113 | 24872751 | CHIP, 1/16W 750 OHM J |
| R7114 | 24872681 | CHIP, 1/16W 680 OHM J |
| R7115 | 24871471 | CHIP, 1/8W 470 OHM J |
| R7116 | 24871471 | CHIP, 1/8W 470 OHM J |
| R7117 | 24872101 | CHIP, 1/16W 100 OHM J |
| R7118 | 24872101 | CHIP, 1/16W 100 OHM J |
| R7119 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7120 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7121 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7122 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7123 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7124 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7125 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7126 | 24871100 | CHIP, 1/8W 10 OHM J |
| R7127 | 24552331 | OXIDE METAL FILM, 1/2W 330 OHM J |
| R7128 | 24872751 | CHIP, 1/16W 750 OHM J |
| R7129 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R7130 | 24872683 | CHIP, 1/16W 68K OHM J |
| R7131 | 24872683 | CHIP, 1/16W 68K OHM J |
| R7132 | 24872751 | CHIP, 1/16W 750 OHM J |
| R7133 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R7134 | 24872102 | CHIP, 1/16W 1K OHM J |
| R7135 | 24553100 | OXIDE METAL FILM, 1W 10 OHM J |
| R7136 | 24321229 | OXIDE METAL FILM, 1/2W 2.2 OHM J |
| R7137 | 24553100 | OXIDE METAL FILM, 1W 10 OHM J |
| R7138 | 24322229 | OXIDE METAL FILM, 1W 2.2 OHM J |
| R7139 | 24554221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7140 | 24872220 | CHIP, 1/16W 22 OHM J |
| R7141 | 24872220 | CHIP, 1/16W 22 OHM J |
| R7701 #2,#3 | 24011392 | CHIP, METAL FILM, 1/20W 3.9K OHM J |
| #1 | 24011392 | CHIP, 1/20W 3.9K OHM J |
| R7702 | 24000445 | CHIP JUMPER, 1608TYPE |
| R7707 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7708 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7710 | 24383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7711 | 24339189 | METAL FILM 2W 1R8 J |
| R7712 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7713 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7715 | 24383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7716 | 24339189 | METAL FILM 2W 1R8 J |
| R7717 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7718 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7720 | 24383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7721 | 24339189 | METAL FILM 2W 1R8 J |
| R7722 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7723 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7725 | 24383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7726 | 24339189 | METAL FILM 2W 1R8 J |
| R7727 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7728 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7730 | 24383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7731 | 24339189 | METAL FILM 2W 1R8 J |
| R7732 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7733 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| R7735 | 24383221 | OXIDE METAL FILM, 2W 220 OHM J |
| R7736 | 24339189 | METAL FILM 2W 1R8 J |
| R7743 | 24322338 | OXIDE METAL FILM, 1W 0.33 OHM J |
| R7744 | 24322338 | OXIDE METAL FILM, 1W 0.33 OHM J |
| R7745 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R7746 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R7747 | 24011221 | CHIP, METAL FILM, 1/20W 220 OHM J |
| R7748 | 24011221 | CHIP, METAL FILM, 1/20W 220 OHM J |
| R7749 | 24011102 | CHIP, METAL FILM, 1/20W 1K OHM J |
| R7750 | 24011332 | CHIP, METAL FILM, 1/20W 3.3K OHM J |
| R7751 | 24011153 | CHIP, METAL FILM, 1/2OW 15K OHM J |
| R7752 | 24011822 | CHIP, METAL FILM, 1/20W 8.2K OHM J |
| R7753 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R7754 | 24011333 | CHIP, METAL FILM, 1/20W 33K OHM J |
| R7755 | 24011153 | CHIP, METAL FILM, 1/2OW 15K OHM J |
| R7756 | 24011153 | CHIP, METAL FILM, 1/2OW 15K OHM J |
| R7757 | 24011681 | CHIP, METAL FILM, 1/20W 680 OHM J |
| R7758 | 24011332 | CHIP, METAL FILM, 1/20W 3.3K OHM J |
| R7760 | 24011682 | CHIP, METAL FILM, 1/20W 6.8K OHM J |
| R7761 | 24011123 | CHIP, METAL FILM, 1/20W 12K OHM J |
| R7762 | 24011682 | CHIP, METAL FILM, 1/20W 6.8K OHM J |
| R7763 | 24011123 | CHIP, METAL FILM, 1/20W 12K OHM J |
| R7765 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7766 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R7767 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7768 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7769 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7770 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7771 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7772 | 24011473 | CHIP, METAL FILM, 1/20W 47K OHM J |
| R7773 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7774 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7801 | 24383471 | OXIDE METAL FILM, 2W 470 OHM J |
| R7802 | 24383681 | OXIDE METAL FILM, 2W 680 OHM J |
| R7880 | 24011221 | CHIP, METAL FILM, 1/20W 220 OHM J |
| R7881 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7882 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7883 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7884 | 24011103 | CHIP, METAL FILM, 1/20W 10K OHM J |
| R7885 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R7886 | 24011104 | CHIP, METAL FILM, 1/20W 100K OHM J |
| R7887 | 24366103 | CARBON FILM, 1/6W 10K OHM J |
| R7890 | 24011331 | CHIP, METAL FILM, 1/20W 330 OHM J |
| R7891 | 24011331 | CHIP, METAL FILM, 1/20W 330 OHM J |
| R7892 | 24366472 | CARBON FILM, 1/6W 4.7K OHM J |
| R7893 | 24011472 | CHIP, METAL FILM, 1/20W 4.7K OHM J |
| R7910 | 24011221 | CHIP, METAL FILM, 1/20W 220 OHM J |
| R7911 | 24011221 | CHIP, METAL FILM, 1/20W 220 OHM J |
| R7912 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R7913 | 24011101 | CHIP, METAL FILM, 1/20W 100 OHM J |
| R7931 | 24000445 | CHIP JUMPER, 1608TYPE |
| R9501 | 24872101 | CHIP, 1/16W 100 OHM J |
| R9503 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R9504 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R9607 | 24872101 | CHIP, 1/16W 100 OHM J |
| R9608 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| R9609 | 24872122 | CHIP, 1/16W 1.2K OHM J |
| RA71 | 24366273 | CARBON FILM, 1/6W 27K OHM J |
| RA72 | 24366153 | CARBON FILM, 1/6W 15K OHM J |
| RA73 | 24366822 | CARBON FILM, 1/6W 8.2K OHM J |
| RA76 | 24366822 | CARBON FILM, 1/6W 8.2K OHM J |
| RA77 | 24366153 | CARBON FILM, 1/6W 15K OHM J |
| RA78 | 24366273 | CARBON FILM, 1/6W 27K OHM J |
| RA79 | 24366823 | CARBON FILM, 1/6W 82K OHM J |
| RB01 | 24366391 | CARBON FILM, 1/6W 390 OHM J |
| RB04 | 24366473 | CARBON FILM, 1/6W 47K OHM J |

| Location No. | Parts No. | Description |
|---|---|---|
| RB05 | 24366102 | CARBON FILM, 1/6W 1K OHM J |
| RB15 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| RB19 | 24366470 | CARBON FILM, 1/6W 47 OHM J |
| RV20 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV21 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV22 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV23 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV33 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV34 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV35 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV36 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV37 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV40 | 24366750 | CARBON FILM, 1/6W 75 OHM J |
| RV61 | 24366101 | CARBON FILM, 1/6W 100 OHM J |
| RV85 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| RV86 | 24366471 | CARBON FILM, 1/6W 470 OHM J |
| RV89 | 24366680 | CARBON FILM, 1/6W 68 OHM J |
| RY160 | 24011471 | CHIP, METAL FILM, 1/20W 470 OHM J |
| **COIL & TRANSFORMERS** | | |
| L101 | 23289845 | COIL, PEAKING, TRF4680AT |
| L103 | 23289844 | COIL, PEAKING, TRF4470AT |
| L302 | 23248073 | COIL, CHOKE, TLN3299D |
| L303 | 23248073 | COIL, CHOKE, TLN3299D |
| L304 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L305 | 23103248 | FERRITR CHOKE, TEM2014AA |
| L310 | 23289846 | COIL, PEAKING, TRF4101AT |
| L401 | 23289560 | COIL, PEAKING, TRF4560AF |
| ⚠ L402 | 23248345 | COIL, CHOKE EI24 120MMH TLN3534AH |
| L403 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L406 | 23248191 | COIL, CHOKE, TLN3351AD |
| L407 | 23103248 | FERRITR CHOKE, TEM2014AA |
| L408 | 23103248 | FERRITR CHOKE, TEM2014AA |
| ⚠ L441 | 23233116 | COIL, LIN X22H37 5.6MMH TLN2222AH |
| ⚠ L462 | 23231390 | DEFLECTION YOKE, TDY707RD TDY707RD |
| ⚠ L463 | 23231390 | DEFLECTION YOKE, TDY707RD TDY707RD |
| ⚠ L464 | 23231390 | DEFLECTION YOKE, TDY707RD TDY707RD |
| L472 | 23102543 | COIL, CPM29.1VM6T MAG-1136 |
| L473 | 23102543 | COIL, CPM29.1VM6T MAG-1136 |
| L474 | 23102543 | COIL, CPM29.1VM6T MAG-1136 |
| L840 | 23280019 | COIL, PEAKING, TRF4330AZ |
| L841 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L850 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L851 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L852 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L854 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L861 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L862 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L864 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L880 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L881 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L885 | 23248073 | COIL, CHOKE, TLN3299D |
| L886 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L887 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L888 | 23248321 | COIL, CHOKE 15X23H 22MMH 4.2A TLN3462AH |
| L891 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L892 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L893 | 23103145 | FERRITE CHOKE, TEM2011AA |
| L894 | 23248247 | COIL, CHOKE, TLN3499AH |
| L895 | 23248247 | COIL, CHOKE, TLN3499AH |
| L896 | 23248247 | COIL, CHOKE, TLN3499AH |
| L902 | 23289159 | COIL, PEAKING, TRF41R5AF |
| L904 | 23289120 | COIL, PEAKING, TRF4120AF |
| L905 | 23289689 | COIL, PEAKING, TRF46R8AF |
| L907 | 23238506 | COIL, PEAKING, TRF4229AJ |
| L911 | 23289220 | COIL, PEAKING, TRF4220AF |

| Location No. | Parts No. | Description |
|---|---|---|
| L913 | 23289159 | COIL, PEAKING, TRF41R5AF |
| L915 | 23289689 | COIL, PEAKING, TRF46R8AF |
| L916 | 23289120 | COIL, PEAKING, TRF4120AF |
| L917 | 23238506 | COIL, PEAKING, TRF4229AJ |
| L923 | 23289159 | COIL, PEAKING, TRF41R5AF |
| L924 | 23289120 | COIL, PEAKING, TRF4120AF |
| L925 | 23289689 | COIL, PEAKING, TRF46R8AF |
| L927 | 23238506 | COIL, PEAKING, TRF4229AJ |
| L7101 | 23289840 | COIL, PEAKING, TRF4100AT |
| L7102 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L7103 | 23103894 | FILTER, FERRITE BEAD, TEM2011AW |
| L7104 | 23261974 | COIL, FERRITE BEAD, HC5-035 |
| L7710 | 23248073 | COIL, CHOKE, TLN3299D |
| L7711 | 23248073 | COIL, CHOKE, TLN3299D |
| LV13 | 23289100 | COIL, PEAKING, TRF4100AF |
| LV20 | 23238705 | COIL, PEAKING, TRF4560AJ |
| LV36 | 23289560 | COIL, PEAKING, TRF4560AF |
| LV37 | 23289560 | COIL, PEAKING, TRF4560AF |
| LY101 | 23248296 | COIL, CHOKE |
| LY102 | 23238506 | COIL, PEAKING, TRF4229AJ |
| LY103 | 23238506 | COIL, PEAKING, TRF4229AJ |
| T400 | 23224386 | TRANSFORMER, FOCUS, TLN2220AH |
| T401 | 23224371 | TRANSFORMER, HORIZ DRIVE, TLN1080AH |
| T461A | 23192972 | ANODE CAP ASSY, TCC5609AT |
| ⚠ T801 | 23211776 | COIL, LINE FILTER 37X44H 6.8MH TRF3197AH |
| ⚠ T840 | 23217431 | TRANSFORMER, CONVERTER, TPW3425AH |
| ⚠ T862 | 23217669 | TRANSFORMER, CONVERTER TPW3549AS |
| T865 | 23224392 | TRANSFORMER, PULSE TLN2229AH |
| **SEMICONDUCTORS** | | |
| Q151 | 23205005 | TRANSISTOR, KTA2014Y |
| Q152 | 23205006 | TRANSISTOR, KTC4075Y |
| Q172 | 23205006 | TRANSISTOR, KTC4075Y |
| Q241 | 23114756 | TRANSISTOR, 2SC2482 |
| Q301 | 23319787 | IC, LA7833S |
| Q302 | 23000711 | IC, TA1317AN |
| Q305 | 23205005 | TRANSISTOR, KTA2014Y |
| Q306 | 70119059 | IC, OP AMP, TA75902P(J) |
| Q370 | 23205006 | TRANSISTOR, KTC4075Y |
| Q371 | 23205005 | TRANSISTOR, KTA2014Y |
| Q372 | 23205006 | TRANSISTOR, KTC4075Y |
| Q400 | 23205079 | TRANSISTOR, 2SC4686A |
| Q402 | 23205166 | TRANSISTOR, FET, 2SK2962 |
| Q404 | 23205149 | TRANSISTOR, 2SC5859(FA) |
| Q405 | 23205005 | TRANSISTOR, KTA2014Y |
| Q406 | 23205006 | TRANSISTOR, KTC4075Y |
| ⚠ Q408 | 23205005 | TRANSISTOR, KTA2014Y |
| Q409 | 23205006 | TRANSISTOR, KTC4075Y |
| Q410 | 23205006 | TRANSISTOR, KTC4075Y |
| Q411 | 23205006 | TRANSISTOR, KTC4075Y |
| Q420 | 23114756 | TRANSISTOR, 2SC2482 |
| Q425 | 23205031 | TRANSISTOR, FET, 2SK2920 |
| Q428 | 23205006 | TRANSISTOR, KTC4075Y |
| Q470 | 23114541 | TRANSISTOR, 2SA1320 |
| Q471 | 23205006 | TRANSISTOR, KTC4075Y |
| Q472 | 23205006 | TRANSISTOR, KTC4075Y |
| Q473 | 23205005 | TRANSISTOR, KTA2014Y |
| Q601 | 23009603 | IC, BTL AUDIO AMP AN7580 |
| Q612 | 23205005 | TRANSISTOR, KTA2014Y |
| Q613 | 23205006 | TRANSISTOR, KTC4075Y |
| Q614 | 23114497 | TRANSISTOR, RN1406 |
| Q661 | 23205204 | TRANSISTOR, NPN VEBO=25V KTC2875B-RTK |
| Q662 | 23205204 | TRANSISTOR, NPN VEBO=25V KTC2875B-RTK |
| Q663 | 23906596 | IC, BA4558 |
| Q664 | 23114493 | TRANSISTOR, RN2404 |
| Q681 | 23205204 | TRANSISTOR, NPN VEBO=25V KTC2875B-RTK |

| Location No. | Parts No. | Description |
|---|---|---|
| Q682 | 23205204 | TRANSISTOR, NPN VEBO=25V KTC2875B-RTK |
| Q711 | 23205269 | TRANSISTOR, VCBO-160V IC-1.5A 2SA2005 |
| Q712 | 23205270 | TRANSISTOR, VCBO 160V 1.5A 2SC5511 |
| Q751 | 23135048 | IC, CONVERGENCE OUT STK394-250A |
| Q752 | 23135048 | IC, CONVERGENCE OUT STK394-250A |
| Q765 | 23205006 | TRANSISTOR, KTC4075Y |
| Q766 | 23205006 | TRANSISTOR, KTC4075Y |
| Q767 | 23205006 | TRANSISTOR, KTC4075Y |
| Q768 | 23205006 | TRANSISTOR, KTC4075Y |
| Q769 | 23906164 | IC, TA75S393F |
| Q782 | 23319894 | IC, NJM79M05FA |
| Q784 | 23009188 | IC, KIA7805API |
| Q785 | 70129444 | IC, PST994D |
| Q794 | 23906164 | IC, TA75S393F |
| Q795 | 23000044 | IC, TC4066BP(N) |
| Q796 | 23205006 | TRANSISTOR, KTC4075Y |
| Q801 | 23135028 | IC, STR-Z4479 |
| Q840 | 23906133 | IC, MIP280 |
| ⚠ Q841 | 23009270 | IC, PHOTO COUPLER, PS2581L1(D) |
| ⚠ Q842 | 23009270 | IC, PHOTO COUPLER, PS2581L1(D) |
| Q843 | 23205006 | TRANSISTOR, KTC4075Y |
| Q844 | 23205006 | TRANSISTOR, KTC4075Y |
| ⚠ Q862 | 23009270 | IC, PHOTO COUPLER, PS2581L1(D) |
| ⚠ Q881 | 23319693 | IC, SE116N, LF4 |
| Q894 | 23205006 | TRANSISTOR, KTC4075Y |
| Q901 | 23205159 | TRANSISTOR, 2SC3942 |
| Q902 | 23205165 | TRANSISTOR, 2SC3950E |
| Q911 | 23205159 | TRANSISTOR, 2SC3942 |
| Q912 | 23205165 | TRANSISTOR, 2SC3950E |
| Q913 | 23205054 | TRANSISTOR, KTA1504Y |
| Q921 | 23205159 | TRANSISTOR, 2SC3942 |
| Q922 | 23205165 | TRANSISTOR, 2SC3950E |
| Q961 | 23205057 | TRANSISTOR, KTC3875Y |
| Q962 | 23205054 | TRANSISTOR, KTA1504Y |
| Q973 | 23205054 | TRANSISTOR, KTA1504Y |
| Q4430 | 23314164 | TRANSISTOR, 2SC2236-Y(C)) |
| Q7101 | 23205057 | TRANSISTOR, KTC3875Y |
| Q7102 | 23205057 | TRANSISTOR, KTC3875Y |
| Q7103 | 70114402 | TRANSISTOR, 2SC3437-Y |
| Q7104 | 23114432 | TRANSISTOR, 2SC1815-GR |
| Q7105 | 23205057 | TRANSISTOR, KTC3875Y |
| Q7106 | 23205057 | TRANSISTOR, KTC3875Y |
| Q7107 | 23205054 | TRANSISTOR, KTA1504Y |
| Q7108 | 23205057 | TRANSISTOR, KTC3875Y |
| Q7109 | 23205054 | TRANSISTOR, KTA1504Y |
| Q7761 | 23205005 | TRANSISTOR, KTA2014Y |
| Q7762 | 23205006 | TRANSISTOR, KTC4075Y |
| Q7763 | 23205006 | TRANSISTOR, KTC4075Y |
| Q7764 | 23205005 | TRANSISTOR, KTA2014Y |
| QB01 | 23114528 | TRANSISTOR, 2SC1740S |
| QH301 | 23900003 | SENSOR, PHOTOSENOR SS-2109Y @E051Z |
| | 23900003 | SENSOR, PHOTOSENOR SS-2109Y @E052Z |
| | 23900003 | SENSOR, PHOTOSENOR SS-2109Y @E053Z |
| | 23900003 | SENSOR, PHOTOSENOR SS-2109Y @E054Z |
| QV48 | 23114528 | TRANSISTOR, 2SC1740S |
| QY160 | 23205006 | TRANSISTOR, KTC4075Y |
| D101 | 23316755 | DIODE, ZENER, MTZJ33C |
| D301 | 23316581 | DIODE, ZENER 7.51-7.89 MA8075-H, TX |
| D302 | 23357366 | DIODE, FR105-B5 |
| D303 | 23316726 | DIODE, ZENER, MTZJ15C |
| D304 | 23316794 | DIODE, SC570A |
| D305 | 23357365 | DIODE, 1N4004A-B5 |
| D306 | 23357365 | DIODE, 1N4004A-B5 |
| D327 | 23316715 | DIODE, ZENER, MTZJ11A |
| D333 | 23316715 | DIODE, ZENER, MTZJ11A |
| D334 | 23316715 | DIODE, ZENER, MTZJ11A |

| Location No. | Parts No. | Description |
|---|---|---|
| D336 | 23316571 | DIODE, ZENER, MA8056-M |
| D337 | 23316571 | DIODE, ZENER, MA8056-M |
| D365 | 23316581 | DIODE, ZENER 7.51-7.89 MA8075-H, TX |
| D370 | 23316231 | DIODE, 1SS355 |
| D401 | 23118056 | DIODE, AG01 |
| D402 | 23357366 | DIODE, FR105-B5 |
| D404 | 23316254 | DIODE, ERC06-15 |
| D406 | 23357366 | DIODE, FR105-B5 |
| D411 | 23316610 | DIODE, ZENER CHIP 17.55-18.45V MA8180-M |
| D412 | 23118707 | DIODE, RP-1H |
| D413 | 23118707 | DIODE, RP-1H |
| D414 | 23357366 | DIODE, FR105-B5 |
| D415 | 23357366 | DIODE, FR105-B5 |
| D418 | 23316755 | DIODE, ZENER, MTZJ33C |
| D419 | 23316231 | DIODE, 1SS355 |
| D420 | 23118859 | DIODE, 1SS133 |
| D421 | 23357366 | DIODE, FR105-B5 |
| D425 | 23357366 | DIODE, FR105-B5 |
| D426 | 23316610 | DIODE, ZENER CHIP 17.55-18.45V MA8180-M |
| D450 | 23357365 | DIODE, 1N4004A-B5 |
| D461 | 23224366 | DIODE, FMQ-3GU |
| D470 | 23316596 | DIODE, ZENER CHIP 11.40-11.96V MA8120-L, TX |
| ⚠ D490 | 23316574 | DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M |
| D491 | 23316231 | DIODE, 1SS355 |
| D492 | 23316591 | DIODE, ZENER, MA8100-M |
| D505 | 23316747 | DIODE, ZENER, MTZJ27C |
| D601 | 23316231 | DIODE, 1SS355 |
| D602 | 23316231 | DIODE, 1SS355 |
| D603 | 23316231 | DIODE, 1SS355 |
| D604 | 23316231 | DIODE, 1SS355 |
| D605 | 23316231 | DIODE, 1SS355 |
| D606 | 23316231 | DIODE, 1SS355 |
| D607 | 23316231 | DIODE, 1SS355 |
| D608 | 23316231 | DIODE, 1SS355 |
| D609 | 23316231 | DIODE, 1SS355 |
| D611 | 23316231 | DIODE, 1SS355 |
| D612 | 23316231 | DIODE, 1SS355 |
| D613 | 23316231 | DIODE, 1SS355 |
| D614 | 23316231 | DIODE, 1SS355 |
| D615 | 23316231 | DIODE, 1SS355 |
| D616 | 23316231 | DIODE, 1SS355 |
| D617 | 23316231 | DIODE, 1SS355 |
| D628 | 23316597 | DIODE, ZENER, MA8120-M |
| D751 | 23357012 | DIODE, 1SS244 |
| D752 | 23357012 | DIODE, 1SS244 |
| D801 | 23316393 | DIODE, VRM=600V IO=6A SIP D5SB60, 4009 F05 |
| D840 | 23357207 | DIODE, LN1WBA60 |
| D841 | 23316572 | DIODE, ZENER CHIP VZ5.66-5.95V MA8056-H |
| D842 | 23316564 | DIODE, ZENER 4.45-4.69 MA8047-L, TX |
| D843 | 23357366 | DIODE, FR105-B5 |
| D844 | 23316571 | DIODE, ZENER, MA8056-M |
| D845 | 23316231 | DIODE, 1SS355 |
| D846 | 23118633 | DIODE, ZENER, RD3.0ES B2 |
| D847 | 23118633 | DIODE, ZENER, RD3.0ES B2 |
| D848 | 23316231 | DIODE, 1SS355 |
| D851 | 23357216 | DIODE, D4SBL20U |
| D852 | 23316714 | DIODE, RL2Z |
| D853 | 23316714 | DIODE, RL2Z |
| D854 | 23357366 | DIODE, FR105-B5 |
| D862 | 23357366 | DIODE, FR105-B5 |
| D864 | 23357366 | DIODE, FR105-B5 |
| D873 | 23316747 | DIODE, ZENER, MTZJ27C |
| D875 | 23316688 | DIODE, ZENER, MTZJ9.1C |
| D876 | 23316759 | DIODE, ZENER, MTZJ36C |
| D878 | 23316686 | DIODE, ZENER, MTZJ9.1A |
| D879 | 23316747 | DIODE, ZENER, MTZJ27C |

| Location No. | Parts No. | Description |
|---|---|---|
| ⚠ D880 | 23316663 | DIODE, ZENER, MTZJ4.3B |
| D881 | 23316231 | DIODE, 1SS355 |
| D883 | 23357018 | DIODE, RL2 |
| D884 | 23357018 | DIODE, RL2 |
| D885 | 23357214 | DIODE, D4SBS4 |
| D891 | 23357434 | DIODE, VRRM=40V IO=5A TO-220F15 YG801C04RF119 |
| D892 | 23357042 | DIODE, FMX-12S(023-108) |
| D893 | 23357042 | DIODE, FMX-12S(023-108) |
| D894 | 23316231 | DIODE, 1SS355 |
| D895 | 23316574 | DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M |
| ⚠ D899 | 24019485 | VARISTOR, TNR10V431K |
| D901 | 23118859 | DIODE, 1SS133 |
| D906 | 23357012 | DIODE, 1SS244 |
| D907 | 23357012 | DIODE, 1SS244 |
| D908 | 23357012 | DIODE, 1SS244 |
| D909 | 23357012 | DIODE, 1SS244 |
| D912 | 23118859 | DIODE, 1SS133 |
| D913 | 23115337 | DIODE, 1S1834 |
| D916 | 23357012 | DIODE, 1SS244 |
| D917 | 23357012 | DIODE, 1SS244 |
| D918 | 23357012 | DIODE, 1SS244 |
| D919 | 23357012 | DIODE, 1SS244 |
| D921 | 23118859 | DIODE, 1SS133 |
| D926 | 23357012 | DIODE, 1SS244 |
| D927 | 23357012 | DIODE, 1SS244 |
| D928 | 23357012 | DIODE, 1SS244 |
| D929 | 23357012 | DIODE, 1SS244 |
| D936 | 23115337 | DIODE, 1S1834 |
| D940 | 23118859 | DIODE, 1SS133 |
| D941 | 23118859 | DIODE, 1SS133 |
| D942 | 23118859 | DIODE, 1SS133 |
| D943 | 23118859 | DIODE, 1SS133 |
| D944 | 23118859 | DIODE, 1SS133 |
| D945 | 23118859 | DIODE, 1SS133 |
| D962 | 23316574 | DIODE, ZENER CHIP VZ6.05-6.36V MA8062-M |
| D967 | 23115337 | DIODE, 1S1834 |
| D4430 | 23357365 | DIODE, 1N4004A-B5 |
| D4431 | 23316593 | DIODE, ZENER CHIP 10.40-10.94V MA8110-L |
| D7101 | 23118859 | DIODE, 1SS133 |
| D7102 | 23118859 | DIODE, 1SS133 |
| D7730 | 23118538 | DIODE, ZENER, RD6.2ESA B2 |
| D7731 | 23118538 | DIODE, ZENER, RD6.2ESA B2 |
| D7760 | 23316231 | DIODE, 1SS355 |
| D7761 | 23118520 | DIODE, ZENER, RD8.2ES B2 |
| D7762 | 23118520 | DIODE, ZENER, RD8.2ES B2 |
| D7763 | 23316231 | DIODE, 1SS355 |
| D7764 | 23316231 | DIODE, 1SS355 |
| D7766 | 23316231 | DIODE, 1SS355 |
| D7790 | 23316231 | DIODE, 1SS355 |
| D7791 | 23316231 | DIODE, 1SS355 |
| D7792 | 23316231 | DIODE, 1SS355 |
| D7793 | 23316585 | DIODE, ZENER, MA8082-M |
| D7806 | 23316231 | DIODE, 1SS355 |
| DB01 | 23358564 | DIODE, LED, SLR-56VC3FPQ |
| DB03 | 23358522 | DIODE, LED, SIR-56SB3F |
| DH301 | 23316672 | DIODE, ZENER, MTZJ5.6B @E051Z |
| | 23316672 | DIODE, ZENER, MTZJ5.6B @E052Z |
| | 23316672 | DIODE, ZENER, MTZJ5.6B @E053Z |
| | 23316672 | DIODE, ZENER, MTZJ5.6B @E054Z |
| KB01 | 23000852 | IC, REMOTE PHOTO RECEIVER, PIC-37043TE2 |

| Location No. | Parts No. | Description |
|---|---|---|
| **MISCELLANEOUS** | | |
| BB10 | 23903022 | CONNECTOR, BASE B-B 8P 2.5 JST |
| BB100 | 23368627 | CONNECTOR, BRIDGE B-B 8P 2.5JST 08TM-2.5FJ-E |
| BB11 | 23903022 | CONNECTOR, BASE B-B 8P 2.5 JST |
| BB20 | 23903022 | CONNECTOR, BASE B-B 8P 2.5 JST |
| BB200 | 23368627 | CONNECTOR, BRIDGE B-B 8P 2.5JST 08TM-2.5FJ-E |
| BB21 | 23903022 | CONNECTOR, BASE B-B 8P 2.5 JST |
| BB60 | 23713014 | CONNECTOR, BRIDGE PLUG 16P 1.5 |
| BB70 | 23713309 | PLUG , TAC-A46P-B1 |
| D461B | 72471082 | SCREW, 3X10MM |
| E918 #1 | 23737007 | BOLT, BOLT ASSY 50A60 |
| #3 | 23737007 | BOLT, BOLT ASSY 50A60 |
| E929 | 23969684 | TAPE, GLASS-CLOTH, W/ADHESIVE W=90 T=0.18 |
| E948 #1 | 23737007 | BOLT, BOLT ASSY 50A60 |
| #3 | 23737007 | BOLT, BOLT ASSY 50A60 |
| E959 | 23969684 | TAPE, GLASS-CLOTH, W/ADHESIVE W=90 T=0.18 |
| E978 #1 | 23737007 | BOLT, BOLT ASSY 50A60 |
| #3 | 23737007 | BOLT, BOLT ASSY 50A60 |
| E989 | 23969684 | TAPE, GLASS-CLOTH, W/ADHESIVE W=90 T=0.18 |
| ⚠ F470 | 23144624 | FUSE, AXIAL 125V 2.0A |
| ⚠ F801 | 23144684 | FUSE, CARTRIDGE 5X20 125V 8.0A |
| F801A | 23165433 | FUSE HOLDER, 5.2 SOC |
| F801B | 23165433 | FUSE HOLDER, 5.2 SOC |
| ⚠ F840 | 23144704 | FUSE, AXIAL 125V 200MA |
| ⚠ F850 | 23144712 | FUSE, AXIAL 125V 3.0A |
| ⚠ F851 | 23144714 | FUSE, AXIAL 125V 4.0A |
| ⚠ F852 | 23144714 | FUSE, AXIAL 125V 4.0A |
| ⚠ F860 | 23144626 | FUSE, AXIAL 125V 4.0A |
| ⚠ F885 | 23144715 | FUSE, AXIAL 125V 5.0A |
| ⚠ F891 | 23144714 | FUSE, AXIAL 125V 4.0A |
| ⚠ F892 | 23144710 | FUSE, AXIAL 125V 2.0A |
| G101 | 24011151 | CHIP, METAL FILM, 1/20W 150 OHM J |
| G102 | 24011151 | CHIP, METAL FILM, 1/20W 150 OHM J |
| GJ101 | 24000445 | CHIP JUMPER, 1608TYPE |
| GJ102 | 24000445 | CHIP JUMPER, 1608TYPE |
| GJ105 | 24000445 | CHIP JUMPER, 1608TYPE |
| GJ107 | 24000445 | CHIP JUMPER, 1608TYPE |
| GJ108 | 24000445 | CHIP JUMPER, 1608TYPE |
| GJ170 | 24000445 | CHIP JUMPER, 1608TYPE |
| GJ911 | 24000445 | CHIP JUMPER, 1608TYPE |
| GR103 | 24000445 | CHIP JUMPER, 1608TYPE |
| GR31 | 24000445 | CHIP JUMPER, 1608TYPE |
| GR32 | 24000445 | CHIP JUMPER, 1608TYPE |
| GR601 | 24000445 | CHIP JUMPER, 1608TYPE |
| H002 | 23148082 | IF MODULE, US BUFFER 6M_TRAP MVUS51A |
| H003 | 23124087 | ANTENNA SWITCH, RSU135X1, 2I3O BUNPAI US |
| H003A | 23740989 | NUT, F-CONNECTOR 2H BS |
| MF01 | 23389209 | CABLE, FFC P1.25-16-200 P1.25-16-200 |
| MF03 | 23389208 | CABLE, FFC P1.25-29-70 P1.25-29-70 |
| P105 | 23368578 | CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4 |
| P404 | 23367069 | CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A |
| P710 | 23368578 | CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4 |
| P711 | 23368578 | CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4 |
| P712 | 23368578 | CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4 |
| ⚠ P800 | 23368013 | CONNECTOR, PLUG, 2P 11.88MM W VT-JST |
| ⚠ P801 | 23372209 | POWER CORD, U/C FL 125V7A CMC042P JST |
| P880A | 23367068 | CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4 |
| P880B | 23367068 | CONNECTOR, PLUG 8P, 2.5MM G JST-EH B8B-EH-F1-TV4 |
| P900 | 23164563 | CONNECTOR, PLUG 3P @E051Z |
| | 23164563 | CONNECTOR, PLUG 3P @E052Z |
| | 23164563 | CONNECTOR, PLUG 3P @E053Z |
| | 23164563 | CONNECTOR, PLUG 3P @E054Z |
| P913 | 23368578 | CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4 |
| P915A | 23367069 | CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A |
| P915B | 23367069 | CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A |
| P917 | 23367069 | CONNECTOR, PLUG, NP 2.5MM G JST-EH, B9B-EH-F1A |

| Location No. | | Parts No. | Description |
|---|---|---|---|
| P918 | | 23368578 | CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4 |
| P919 | | 23368577 | CONNECTOR, PLUG, 3P 2.5MM G JST-EH, B3B-EH-F1-TV4 |
| P920 | | 23164965 | CONNECTOR, PLUG 4P, W-P3504-#02 |
| PB22 | | 23368578 | CONNECTOR, PLUG 4P, 2.5MM G JST-EH, B4B-EH-F1-TV4 |
| PV01 | | 23023132 | JACK, PIN 2S6P SMK LAP5030-0111GC |
| PV02 | | 23023205 | JACK, PIN 10P SMK KARI2 |
| PV03 | | 23023211 | JACK, PIN 7P SMK KARI04 |
| PV05 | | 23365819 | JACK, 1S3P |
| PV60 | | 23367070 | PLUG , NP 2.5MM G JST-EH B10B-EH-F1A |
| Q404B | | 72471082 | SCREW, 3X10MM |
| SA01 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA02 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA03 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA04 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA05 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA06 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA07 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA08 | | 23145226 | SWITCH, 1C1P, PUSH |
| SA09 | | 23145226 | SWITCH, 1C1P, PUSH |
| ⚠ SR81 | | 23146577 | RELAY, DLS5D1-O(M)0.25W DLS5D1-O(M)0. |
| ⚠ SR82 | | 23146564 | RELAY, DC12V, TV5, DG-3 |
| ⚠ V901A | | 23903180 | SOCKET, ISHM62S-WE ICE ISHM62S-WE |
| ⚠ V902A | | 23903180 | SOCKET, ISHM62S-WE ICE ISHM62S-WE |
| ⚠ V903A | | 23903180 | SOCKET, ISHM62S-WE ICE ISHM62S-WE |
| W661 | #2,#3 | 23351242 | SPEAKER, 160X160 8-OHM 20W SPK-1424AW |
| | #1 | 23351167 | SPEAKER, SPK1390AE |
| W662 | #2,#3 | 23351242 | SPEAKER, 160X160 8-OHM 20W SPK-1424AW |
| | #1 | 23351167 | SPEAKER, SPK1390AE |
| Z101 | | 23103840 | FERRITE CORE, TFE1013 |
| Z401 | | 23140203 | SPARK GAP, 2.0-3.0KV C-010, AG20PC152F-L3N |
| ⚠ Z410 | | 23110841 | FOCUS PACK, TPA6030 |
| ⚠ Z450 | | 24083014 | COMPOSITE PARTS, CR-BLOCK TPA5011AH |
| Z450A | | 23501755 | ANODE CABLE, 400LD FBT-C |
| Z801 | | 23103840 | FERRITE CORE, TFE1013 |
| ZH04 | | 23103778 | FERRITE CORE, TFE1008 |
| ZH05 | | 23103840 | FERRITE CORE, TFE1013 |

**PC BOARD ASSEMBLIES**

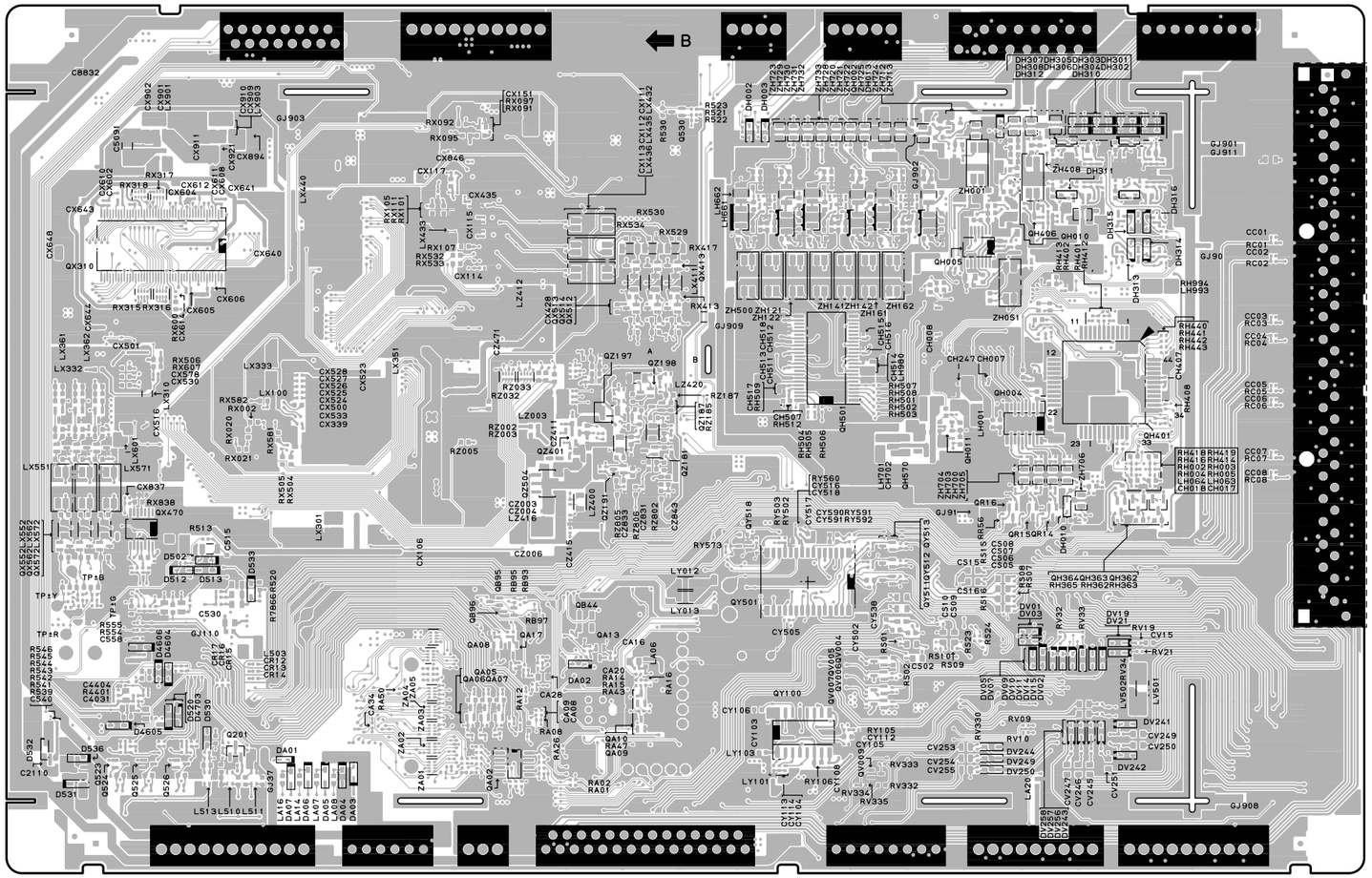
| | | | |
|---|---|---|---|
| E021Z | #2,#3 | 23761995 | PC BOARD ASSY, BACK/AV 51H84 PU PD1735A1 |
| | #1 | 23762482 | PC BOARD ASSY, BACK/AV 46H84 PU PD1876A1 |
| E022Z | #2,#3 | 23761996 | PC BOARD ASSY, FRONT-CON 51H84 PU PD1735A2 |
| | #1 | 23762483 | PC BOARD ASSY, FRONT-CON 46H84 PU PD1876A2 |
| E023Z | #2,#3 | 23761997 | PC BOARD ASSY, FRONT-IN 51H84 PU PD1735A3 |
| | #1 | 23762484 | PC BOARD ASSY, FRONT-IN 46H84 PU PD1876A3 |
| E024Z | #2,#3 | 23761998 | PC BOARD ASSY, REMOTE 51H84 PU PD1735A4 |
| | #1 | 23762485 | PC BOARD ASSY, REMOTE 46H84 PU PD1876A4 |
| E031Z | | 23761984 | PC BOARD ASSY, CRT/SVM/R 51H84 PU PD1733A1 |
| E032Z | | 23761985 | PC BOARD ASSY, CRT/SVM/G 51H84 PU PD1733A2 |
| E033Z | | 23761986 | PC BOARD ASSY, CRT/SVM/B 51H84 PU PD1733A3 |
| E034Z | | 23762013 | PC BOARD ASSY, SVM/DIV 51H84 PU PD1733A4 |
| E051Z | | 23762004 | PC BOARD ASSY, CONV-SEN 51H84 PU PD0079B |
| E052Z | | 23762005 | PC BOARD ASSY, CONV-SEN2 51H84 PU PD0079B2 |
| E053Z | | 23762006 | PC BOARD ASSY, CONV-SEN3 51H84 PU PD0079B3 |
| E054Z | | 23762007 | PC BOARD ASSY, CONV-SEN4 51H84 PU PD0079B4 |
| U001 | | 23148103 | SCAN CONVERTER MODUL, MHSU11 MHSU11 |
| U401 | #1 | 23762135 | PC BOARD ASSY, DEFPOWER 46H84 PU PD1730C |
| | #2 | 23761973 | PC BOARD ASSY, DEFPOWER 51H84 PU PD1730A |
| | #3 | 23762134 | PC BOARD ASSY, DEFPOWER 57H84 PU PD1730B |
| U601 | | 23761975 | PC BOARD ASSY, IF/AUDIO 51H84 PU PD1731A2 |
| U711 | | 23761974 | PC BOARD ASSY, CONVER 51H84 PU PD1731A1 |
| UV02 | | 23148055 | SCAN CONVERTER MODUL, 03DVI MHDM01 |

| Location No. | | Parts No. | Description |
|---|---|---|---|
| **PICTURE TUBE** | | | |
| V901R | #1 | 23078432 | OTHER BLOCK, COUPLING R |
| | #2 | 23078357 | OTHER, COUPLING R |
| | #3 | 23078433 | OTHER BLOCK, COUPLING R |
| V902G | #1 | 23078430 | OTHER BLOCK, COUPLING G |
| | #2 | 23078358 | OTHER, COUPLING G |
| | #3 | 23078430 | OTHER BLOCK, COUPLING G |
| V903B | #1 | 23078431 | OTHER BLOCK, COUPLING B |
| | #2 | 23078359 | OTHER, COUPLING B |
| | #3 | 23078434 | OTHER BLOCK, COUPLING B |
| **TUNER** | | | |
| ⚠ H001 | | 23321482 | TUNER, US181CH IIC PH 5V PANA ELA52LX5 |
| ⚠ HY01 | | 23321480 | TUNER, TIF US IIC PH 181CH 5V ENG36A18GF |
| **ACCESSORIES** | | | |
| A701 | #1 | 23067159 | CARTON, CARTON |
| | #2 | 23067099 | CARTON, CARTON |
| | #3 | 23067100 | CARTON, CARTON |
| A703 | #1 | 23946513 | PACKING, TOP PACKING |
| | #2 | 23946479 | PACKING, TOP PACKING |
| | #3 | 23946481 | PACKING, TOP PACKING |
| A707 | #1 | 23946510 | PACKING, BTM TRAY ASSY |
| A708 | #2 | 23946478 | PACKING, BOTTOM PACKING |
| | #3 | 23946480 | PACKING, BOTTOM PACKING |
| A709 | #2 | 23946483 | PACKING, BOTTOM TRAY |
| | #3 | 23946187 | PACKING, BASE TRAY |
| ⚠ K912 | | 23306497 | REMOCON HAND UNIT IR, CTVUSA CT-90159 |
| ⚠ Y101 | | 23566304 | OWNERS MANUAL, ENGLISH/FRENCH 51H84 |
| **CABINET PARTS** | | | |
| ⚠ A001 | #1 | 23429060 | CABINET, WD CAB ASSY, 46H84 |
| ⚠ | #2 | 23429055 | CABINET, WOOD CABI SHIP 51H84 |
| ⚠ | #3 | 23429091 | CABINET, WOOD CABINET SHIP 57H84 |
| A102 | #1 | 23527274 | GRILLE, SPK GRILLE ASSY |
| | #2 | 23527268 | GRILLE, SPEAKER GRILLE 51 REG |
| | #3 | 23527269 | GRILLE, SPEAKER GRILLE 57 REG |
| A160 | | 23469228 | CASTER, TP50H60 |
| ⚠ A201 | #1 | 23530960 | COVER, BEZEL |
| ⚠ | #1 | 23532713 | COVER, BEZEL ASSEMBLY 46H84 |
| ⚠ | #2 | 23530779 | COVER, BEZEL |
| ⚠ | #3 | 23532728 | COVER, BEZEL ASSEY 57H84 |
| A202 | #2,#3 | 23450649 | PANEL, CONTROL ASSY |
| | #1 | 23450682 | PANEL, CONTROL PANEL ASSEMBLY |
| A213 | #2,#3 | 23428187 | DOOR |
| | #1 | 23428212 | DOOR |
| A215 | | 23929911 | PIECE, SNAP-IN GEAR DAMPER CONNON |
| A222 | | 23929910 | PIECE, FILTER |
| A223 | #2,#3 | 23445705 | BUTTON, POWER BUTTON |
| | #1 | 23445733 | BUTTON, POWER BUTTON |
| A268 | #1 | 23530997 | COVER, BEZEL,SPEAKER |
| | #2 | 23530772 | COVER, FRONT COVER |
| | #3 | 23530770 | COVER, FRONT COVER |
| A329 | #2 | 23433231 | DECORATIVE, PIECE |
| | #3 | 23433230 | DECORATIVE, PIECE |
| A331 | #2 | 23929897 | PIECE, POLE BOTTOM LEFT |
| | #3 | 23929899 | PIECE, POLE BOTTOM LEFT |
| A332 | #2 | 23929898 | PIECE, POLE BOTTOM RIGHT |
| | #3 | 23929900 | PIECE, POLE BOTTOM RIGHT |
| ⚠ A401 | #1 | 23530962 | COVER, BACK COVER |
| ⚠ | #2 | 23530781 | COVER, BACK COVER |
| ⚠ | #3 | 23429132 | CABINET, BACK COVER ASSEY 57H84 |
| ⚠ A421 | | 23530812 | COVER, REAR BOARD |
| ⚠ A424 | | 23429059 | CABINET, BACK BOARD 51H84 |
| A510 | | 23030815 | SCREW, WOOD, PTD #6 X 3/4 |
| A721 | | 23943628 | PLYETHLENE COVERING 46GM88T |

| Location No. | | Parts No. | Description |
|---|---|---|---|
| K501 | #1 | 23311087 | SCREEN, 46KP LENTICULAR SHEET SCREEN46KP-L |
| | #2 | 23311088 | SCREEN, 51KP LENTICULAR SHEET SCREEN51KP-L |
| | #3 | 23311013 | SCREEN, 57KNH LENTICULAR SHEET SCREEN57KNHL |
| K502 | #1 | 23311018 | SCREEN, 46KN FRESNEL SHEET SCREEN46KN-F |
| | #2 | 23311016 | SCREEN, 51KN FRESNEL SHEET SCREEN51KN-F |
| | #3 | 23311014 | SCREEN, 57KN FRESNEL SHEET SCREEN57KN-F |
| K503 | #1 | 23311094 | SCREEN, PROTECTOR 46RP SCR-PRO46RP |
| | #2 | 23311019 | SCREEN, PROTECTOR 51RN SCR-PRO51RN |
| | #3 | 23311862 | SCREEN, PROTECTOR 57RL SCR-PRO57RL |
| K601 | #1 | 23405273 | MIRROR, 46W MIRROR46L |
| | #2 | 23405249 | MIRROR, 51WL |
| | #3 | 23405409 | MIRROR, 57WL MIRROR57WL |

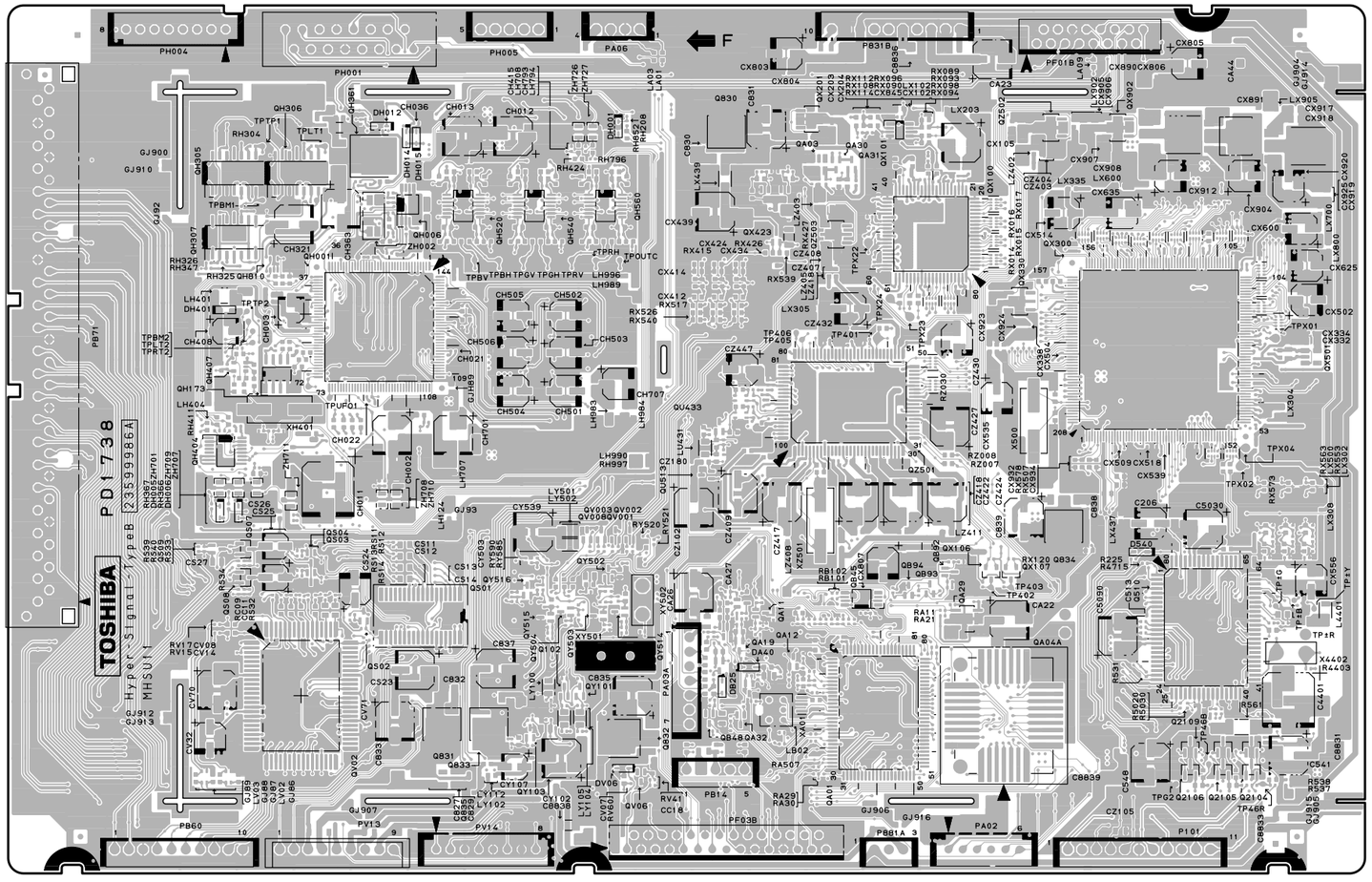
# SCAN CONVERTER MODUL, MHSU11 PD1738 (U001 )

**BOTTOM (FOIL) SIDE**



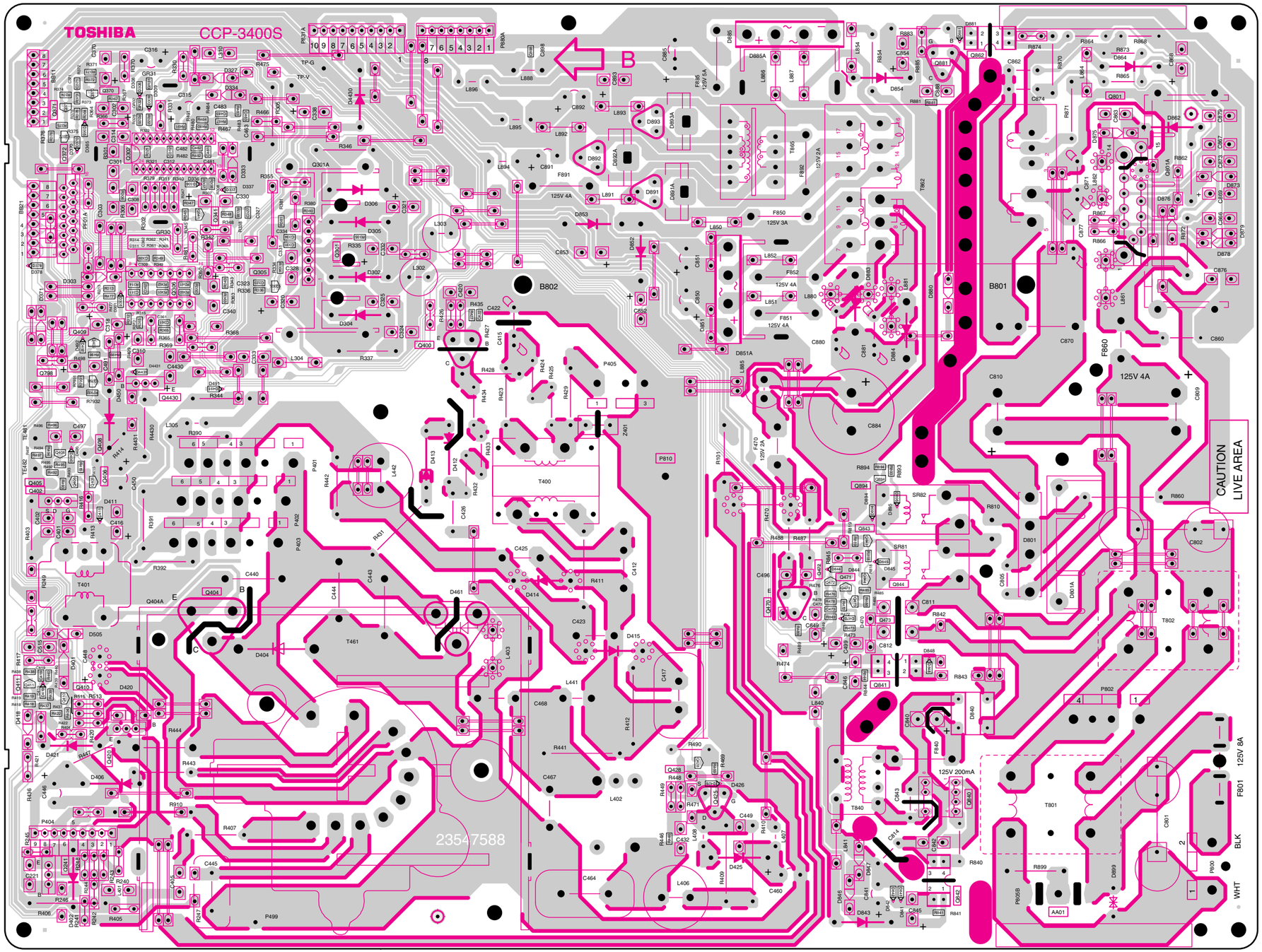
# SCAN CONVERTER MODUL, MHSU11 PD1738 (U001 )

**TOP (COMPONENT) SIDE**



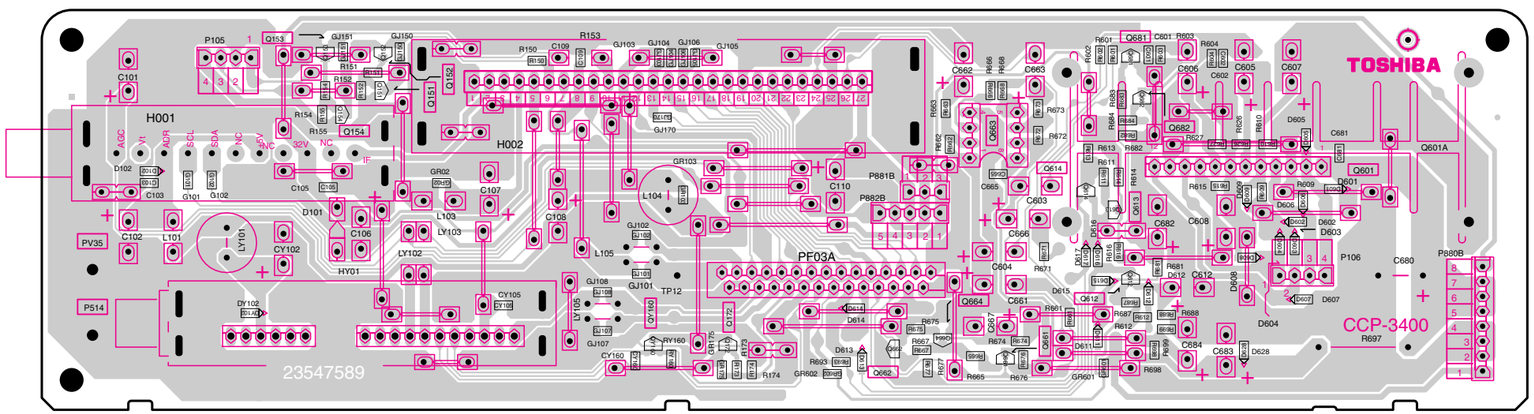
# DEFPOWER BOARD (46H84:PD1730C 51H84:PD1730A 57H84:PD1730B) (U401)

**BOTTOM (FOIL) SIDE**



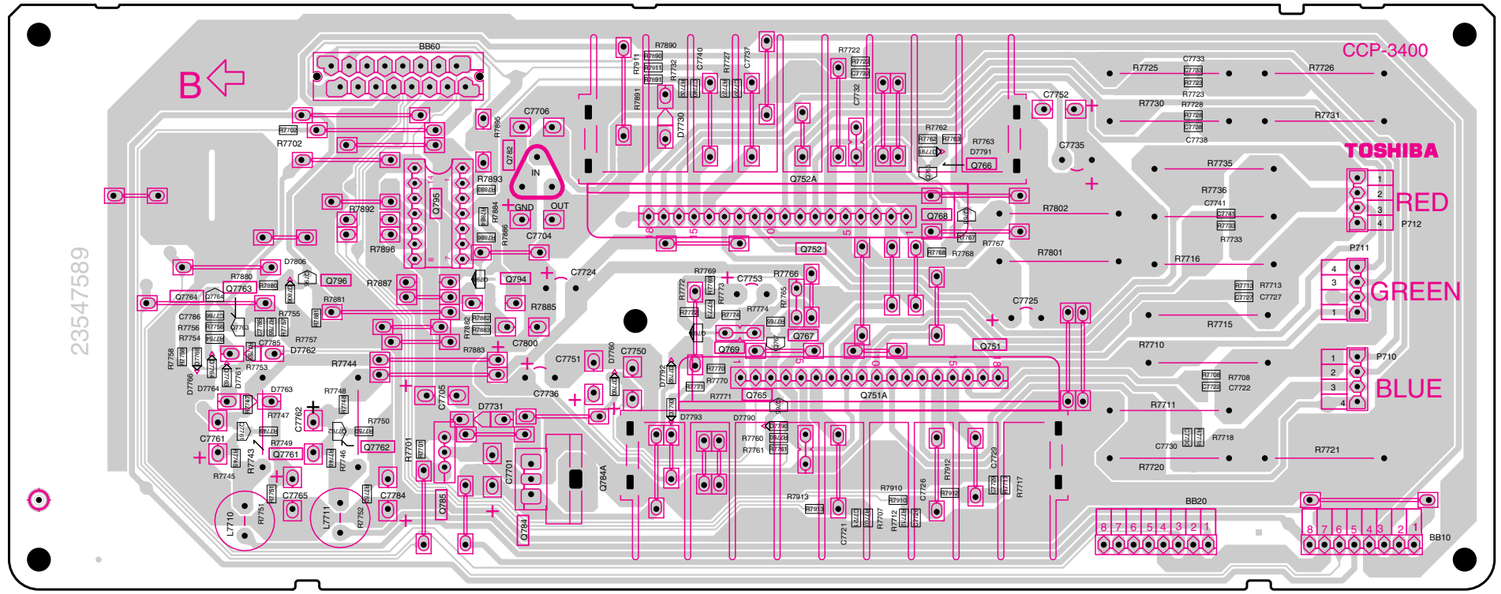
# IF/AUDIO BOARD PD1731A2 (U601)

**BOTTOM (FOIL) SIDE**



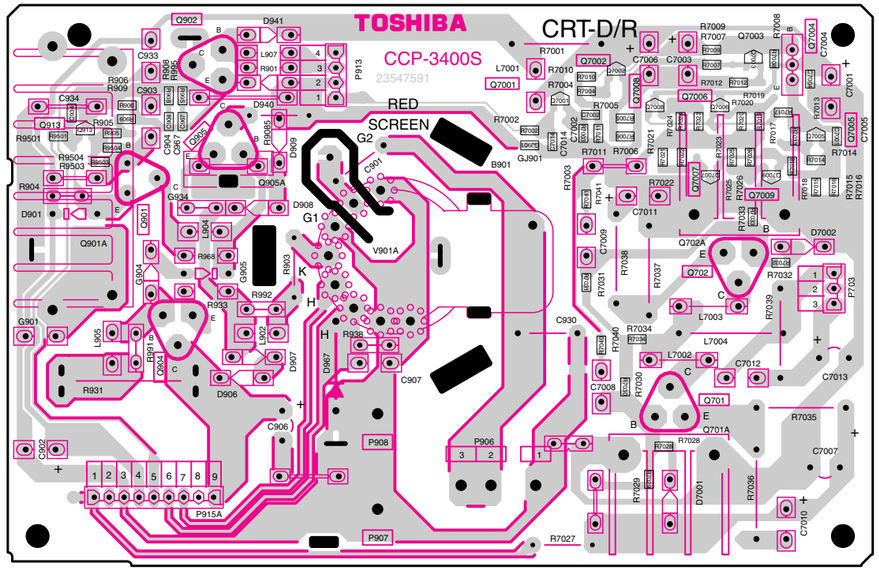

# CONVER BOARD PD1731A1 (U711)

**BOTTOM (FOIL) SIDE**



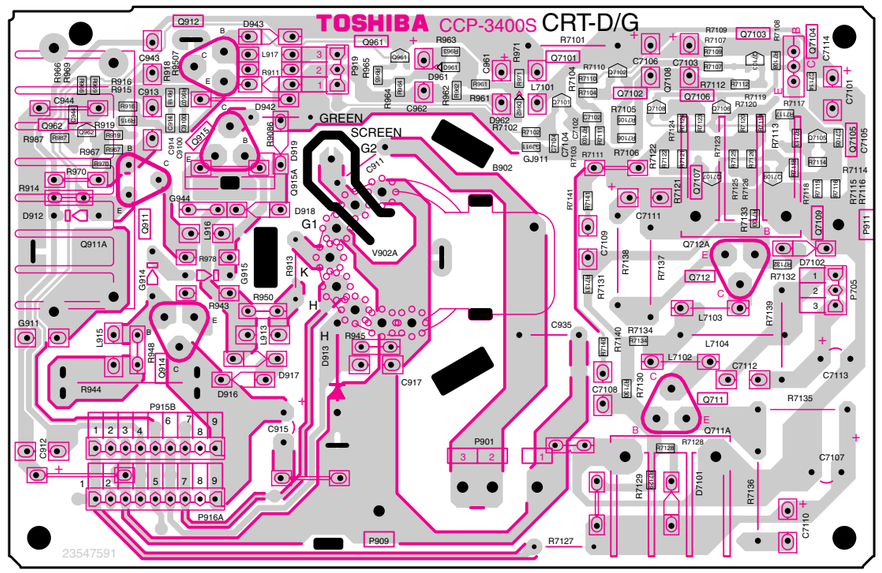
## CRT/SVM/R BOARD PD1733A1 (E031Z)

**BOTTOM (FOIL) SIDE**



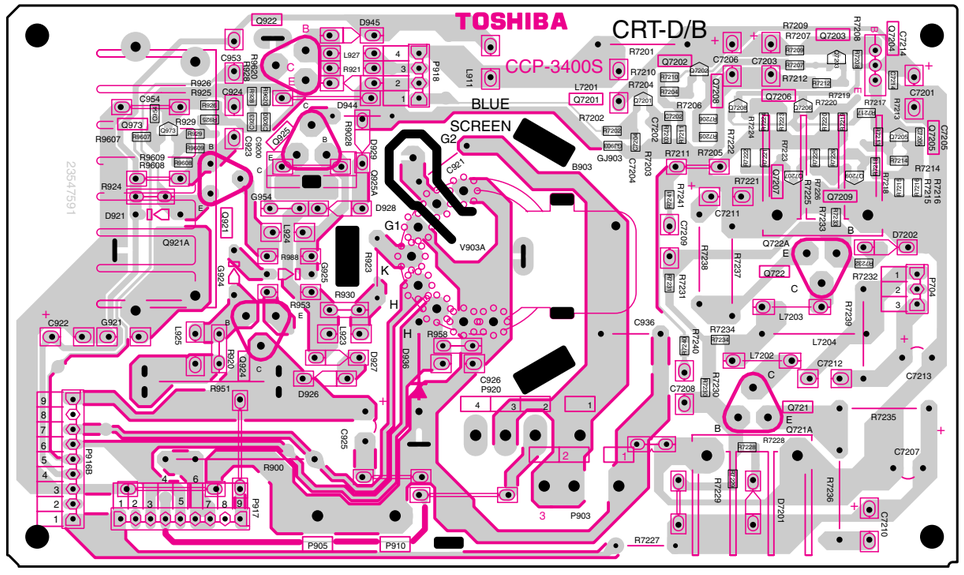

## CRT/SVM/G BOARD PD1733A2 (E032Z)

**BOTTOM (FOIL) SIDE**



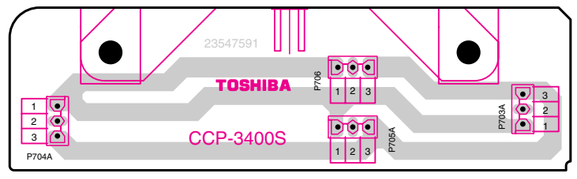

## CRT/SVM/B BOARD PD1733A3 (E033Z)

**BOTTOM (FOIL) SIDE**




## SVM/DIV BOARD PD1733A4 (E034Z)

**BOTTOM (FOIL) SIDE**



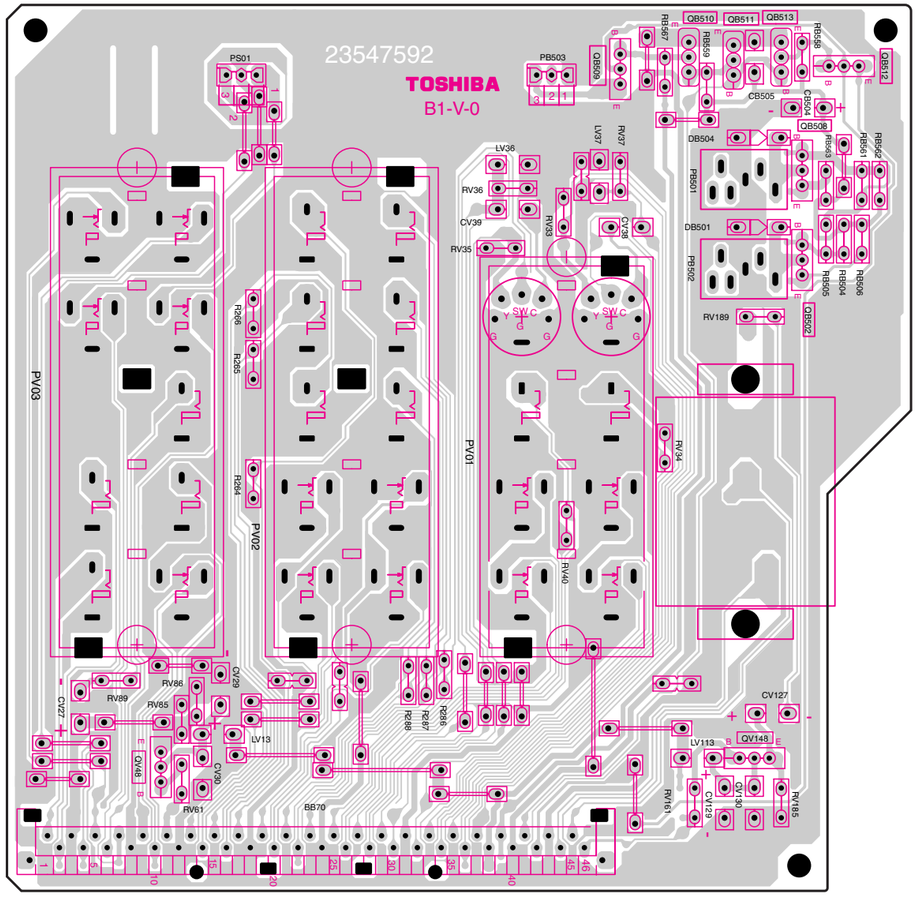

## CONV-SEN BOARD PD0079

**BOTTOM (FOIL) SIDE**



## BACK/AV BOARD (51H84/57H84:PD1735A1) (E021Z)

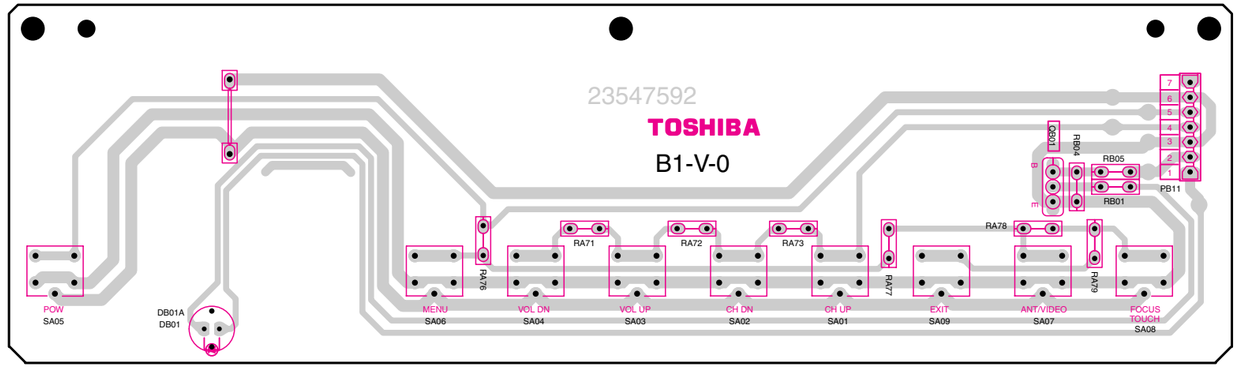
**BOTTOM (FOIL) SIDE**





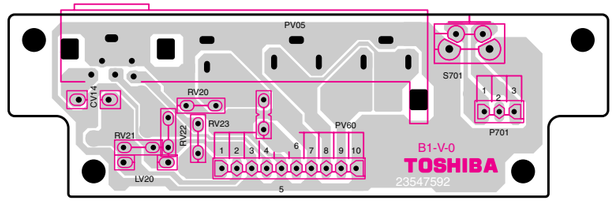

## FRONT-CON BOARD (51H84/57H84:PD1735A2) (E022Z)

**BOTTOM (FOIL) SIDE**



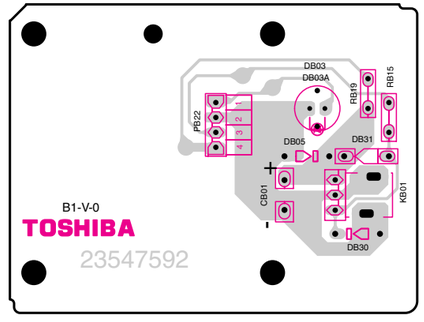

## FRONT IN BOARD (51H84/57H84:PD1735A3) (E023Z)

**BOTTOM (FOIL) SIDE**



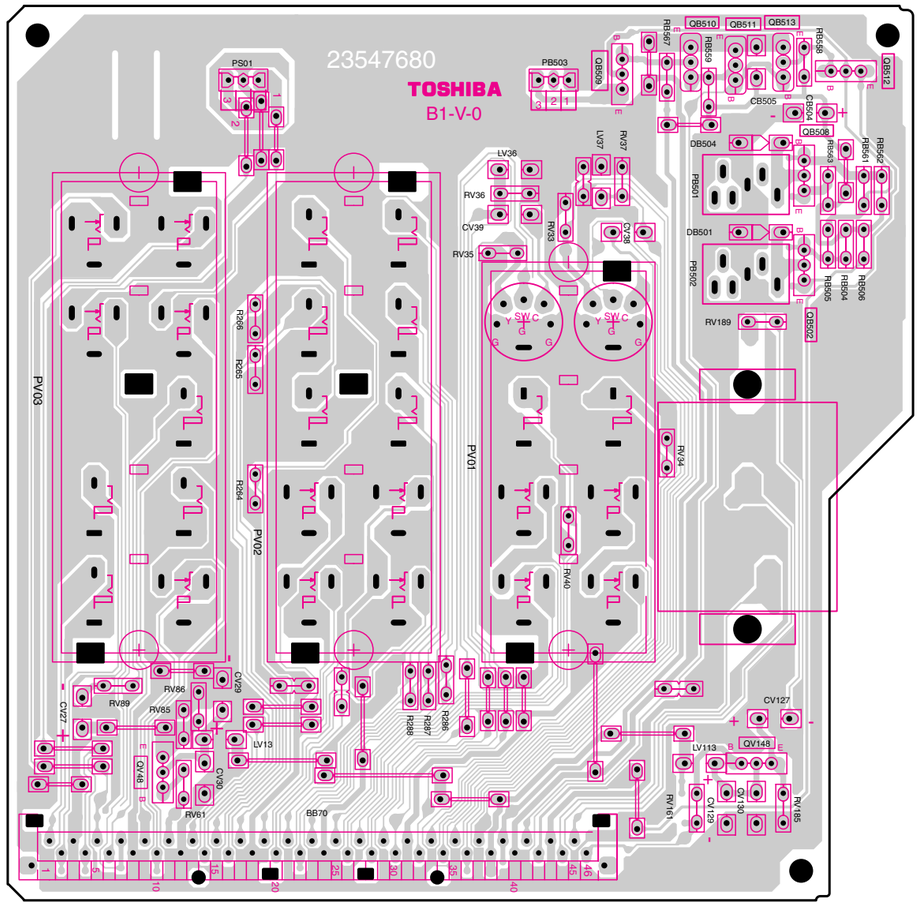

## REMOTE BOARD (51H84/57H84:PD1735A4) (E024Z)

**BOTTOM (FOIL) SIDE**



## BACK/AV BOARD (46H84:PD1876A1) (E021Z)

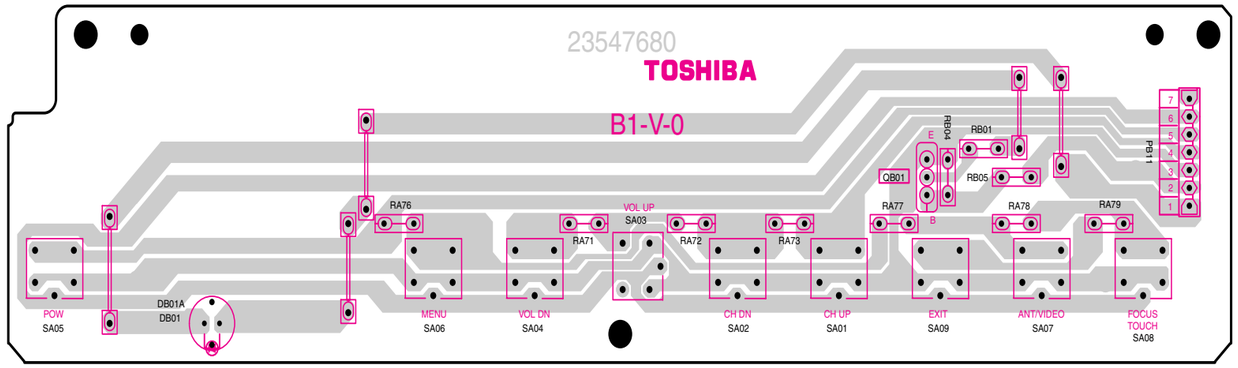
**BOTTOM (FOIL) SIDE**





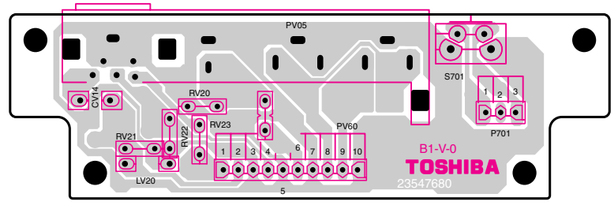

## FRONT-CON BOARD (46H84:PD1876A2) (E022Z)

**BOTTOM (FOIL) SIDE**



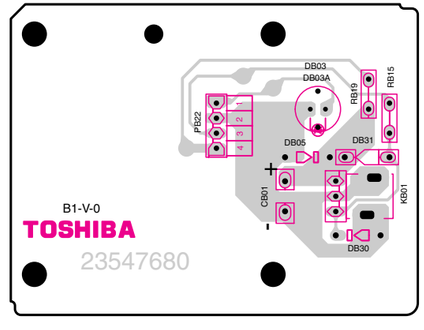

## FRONT IN BOARD (46H84:PD1876A3) (E023Z)

**BOTTOM (FOIL) SIDE**



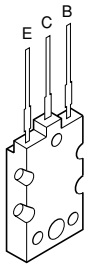

## REMOTE BOARD (46H84:PD1876A4) (E024Z)

**BOTTOM (FOIL) SIDE**

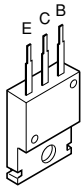


# TERMINAL VIEW OF TRANSISTORS

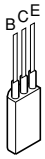
① 2SC5144
2SC5859



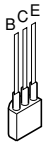

② 2SC3852
2SD1763A
2SC1569
2SC4544
2SA1788
2SA1306
2SA1186A



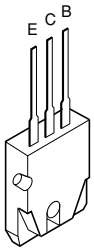

③ 2SC752GTM
2SC2482
2SC2655
2SC4721P



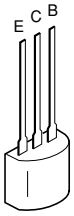

④ 2SC752
2SA562TM
2SA1015
2SC1815
2SC2878
2SC1740S
2SC2120
2SA9335



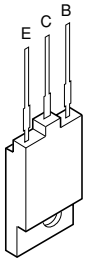

⑤ 2SA1788



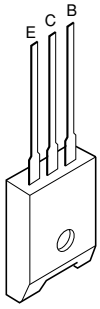

⑥ RN2203
RN2201
RN2004
RN1203
RN1204
RN2204
RN1205
RN1202
RN1201




⑦ 2SD1554
2SD2253
2SD1556
2SD2553
2SC5143




⑧ ON4409



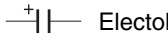
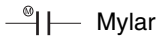
# SCHEMATIC DIAGRAM

## MODEL : 46H84/51H84/57H84

**WARNING**: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

**CAUTION**: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

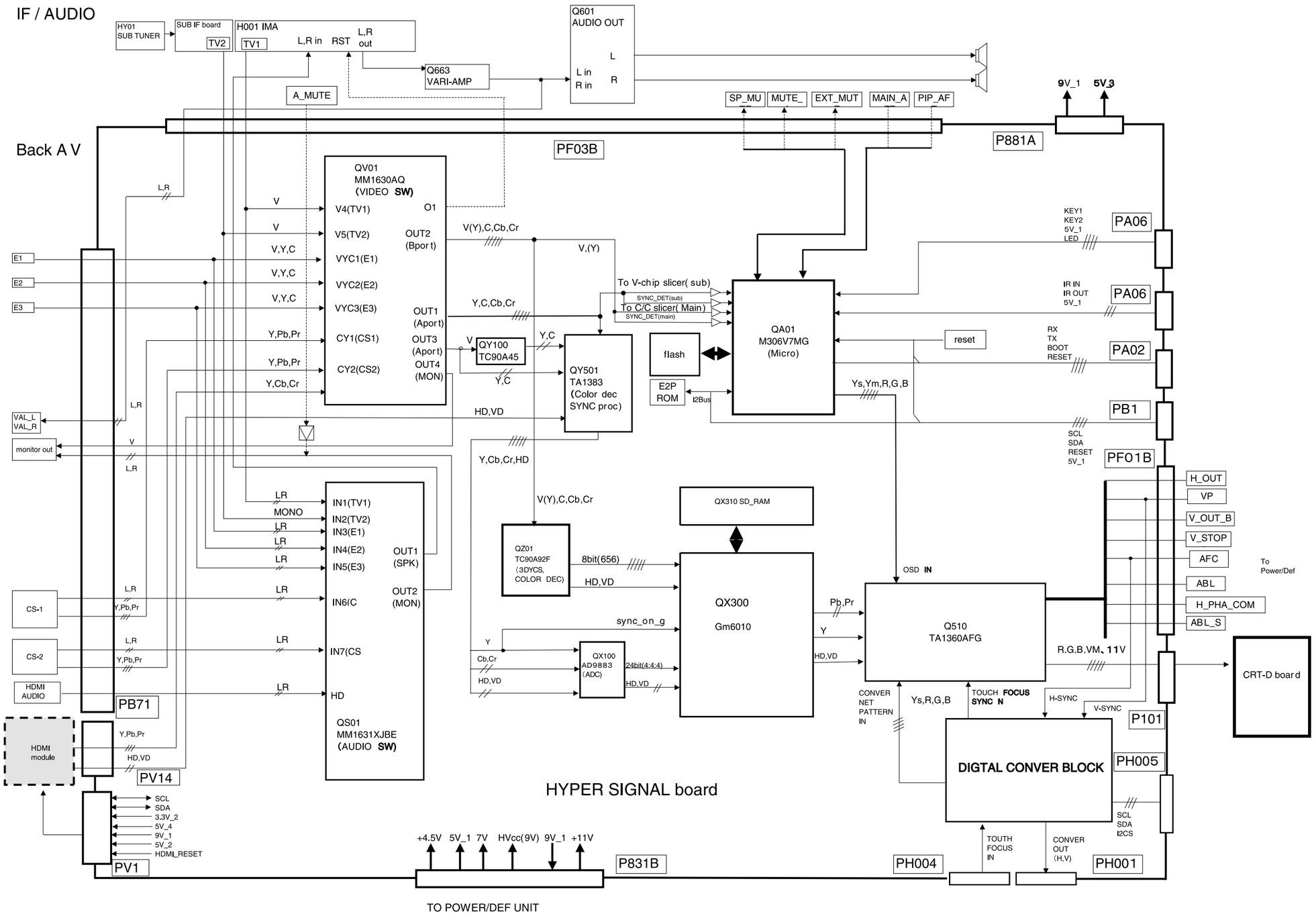
**NOTE:**

1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt
   1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt
   10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.
    Electolytic capacitor
    Mylar capacitor
3. The parts indicated with "⚠" have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage at 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

■ **SCHEMATIC DIAGRAM STRUCTURE:**


- DEF POWER Circuit
  - (1/3) [ SHEET - 1/3] ..... 1/61
  - (2/3) [ SHEET - 2/3] ..... 2/61
  - (3/3) [ SHEET - 3/3] ..... 3/61
- BACK/AV (51H84, 57H84) Circuit ..... 4/61
- BACK/AV (46H84) Circuit ..... 5/61
- CONV/IF/AUDIO
  - (1/3) [ SHEET - 1/3] ..... 6/61
  - (2/3) [ SHEET - 2/3] ..... 7/61
  - (3/3) [ SHEET - 3/3] ..... 8/61
- CONVER OUT Circuit ..... 9/61
- FRONT IN/CONT/REMOVE Circuit ..... 10/61
- CRT-D Circuit
  - (1/2) [ SHEET - 1/2] .....11/61
  - (2/2) [ SHEET - 2/2] .....12/61
- AV Circuit
  - (1/10) [ SHEET - 1/10] .....13/61
  - (2/10) [ SHEET - 2/10] .....14/61
  - (3/10) [ SHEET - 3/10] .....15/61
  - (4/10) [ SHEET - 4/10] .....16/61
  - (5/10) [ SHEET - 5/10] .....17/61
  - (6/10) [ SHEET - 6/10] .....18/61
  - (7/10) [ SHEET - 7/10] .....19/61
  - (8/10) [ SHEET - 8/10] .....20/61
  - (9/10) [ SHEET - 9/10] .....21/61
  - (10/10) [ SHEET - 10/10] .....22/61
- MICON Circuit
  - (1/10) [ SHEET - 1/10] .....23/61
  - (2/10) [ SHEET - 2/10] .....24/61
  - (3/10) [ SHEET - 3/10] .....25/61
  - (4/10) [ SHEET - 4/10] .....26/61
  - (5/10) [ SHEET - 5/10] .....27/61
  - (6/10) [ SHEET - 6/10] .....28/61
  - (7/10) [ SHEET - 7/10] .....29/61
  - (8/10) [ SHEET - 8/10] .....30/61
  - (9/10) [ SHEET - 9/10] .....31/61
  - (10/10) [ SHEET - 10/10] ..... 32/61
- G-HYPER Circuit
  - (1/3) [ SHEET - 1/3] .....33/61
  - (2/3) [ SHEET - 2/3] .....34/61
  - (3/3) [ SHEET - 3/3] .....35/61
- AD-CONVERTER Circuit
  - (A) [ SHEET - 1/3] .....36/61
  - (B) [ SHEET - 2/3] .....37/61
  - (C) [ SHEET - 3/3] .....38/61
- GC-TC90A92A Circuit
  - (1/3) [ SHEET - 1/3] .....39/61
  - (2/3) [ SHEET - 2/3] .....40/61
- GC-REG Circuit ..... 41/61
- GC-TC90A92A Circuit
  - (3/3) [ SHEET - 3/3] .....42/61
- GNESIS Circuit
  - (1/3) [ SHEET - 1/3] .....43/61
  - (2/3) [ SHEET - 2/3] .....44/61
  - (3/3) [ SHEET - 3/3] .....45/61
- SDRAM Circuit ..... 46/61
- GNESIS OUT Circuit ..... 47/61
- GNESIS REG Circuit ..... 48/61
- CPU Circuit ..... 49/61
- DIGITAL CONVER Circuit
  - (1/8) [ SHEET - 1/8] .....50/61
  - (2/8) [ SHEET - 2/8] .....51/61
  - (3/8) [ SHEET - 3/8] .....52/61
  - (4/8) [ SHEET - 4/8] .....53/61
  - (5/8) [ SHEET - 5/8] .....54/61
  - (6/8) [ SHEET - 6/8] .....55/61
  - (7/8) [ SHEET - 7/8] .....56/61
  - (8/8) [ SHEET - 8/8] .....57/61
- CONVER-REG Circuit
  - (1/4) [ SHEET - 1/4] .....58/61
  - (2/4) [ SHEET - 2/4] .....59/61
  - (3/4) [ SHEET - 3/4] .....60/61
  - (4/4) [ SHEET - 4/4] .....61/61

# CIRCUIT BLOCK DIAGRAM



## SPECIFICATIONS

Television System
NTSC standard

Channel Coverage
VHF: 2 through 13
UHF: 14 through 69
Cable TV: Mid band (A-8 through A-1, A through I)
Super band (J through W)
Hyper band (AA through ZZ, AAA, BBB)
Ultra band (65 through 94, 100 through 125)

Power Source
120 V AC, 60 Hz

Power Consumption
185 W (average)

Audio Power
15 W + 15W

Speaker Type
46H84: Two 4-3/4 inches (12 cm) round
51H84: Two 6-5/16 inches (16 cm) round
57H84: Two 6-5/16 inches (16 cm) round

Video/Audio Terminals
S-VIDEO INPUT
Y : 1 V(p-p), 75 ohms, negative sync.
C : 0.286 V(p-p) (burst signal), 75 ohms
VIDEO/AUDIO INPUT
VIDEO: 1 V(p-p), 75 ohms, negative sync.
AUDIO: 150 mV(rms) (30% modulation equivalent
22 k ohms or more)
ColorStream® (component video) INPUT
Y : 1V(p-p), 75 ohms
$P_R$: 0.7 V(p-p), 75 ohms
$P_B$: 0.7 V(p-p), 75 ohms
AUDIO: 150 mV(rms), 22 k ohms or more
VIDEO/AUDIO OUTPUT
VIDEO: 1 V(p-p), 75 ohms, negative sync.
AUDIO: 150 mV(rms) (30% modulation equivalent
2.2 k ohms or less)
VARIABLE AUDIO OUTPUT
0–300 mV(rms) (30% modulation equivalent,
2.2 k ohms or less)
HDMI INPUT
HDMI typeA
Suggested scan rates: 1080i, 720p, 480p, 480i

Dimensions
46H84: Width 43-3/8 inches (1,100 mm)
Height 40-1/2 inches (1,026 mm)
Depth 21-7/8 inches (555 mm)
51H84: Width 47-9/16 inches (1,206 mm)
Height 50-1/2 inches (1,280 mm)
Depth 22-1/2 inches (570 mm)
57H84: Width 52-3/4 inches (1,340 mm)
Height 55-3/4 inches (1,415 mm)
Depth 23-7/8 inches (606 mm)

Mass
46H84: 143 lbs (65.0 kg)
51H84: 169 lbs (76.0 kg)
57H84: 204 lbs (92.0 kg)

Supplied Accessories
Remote Control with 2 size “AA” alkaline batteries

Optional TV Stand
46H84: ST4663

*1 E-EDID = Enhanced-Extended Display Identification
*2 Design and specifications are subject to change without notice.

– END –

TOSHIBA CORPORATION
1-1, SHIBAURA 1-CHOME, MINATO-KU, TOKYO 105-8001, JAPAN

# SCHEMATIC DIAGRAM

## MODEL : 46H84/51H84/57H84

**WARNING**: BEFORE SERVICING THIS CHASSIS, READ THE "X-RAY RADIATION PRECAUTION", "SAFETY PRECAUTION" AND "PRODUCT SAFETY NOTICE" ON THE MANUAL FOR THIS MODEL.

**CAUTION**: The international hazard symbols "⚠" in the schematic diagram and the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE on the MANUAL for this model. Do not degrade the safety of the receiver through improper servicing.

**NOTE:**

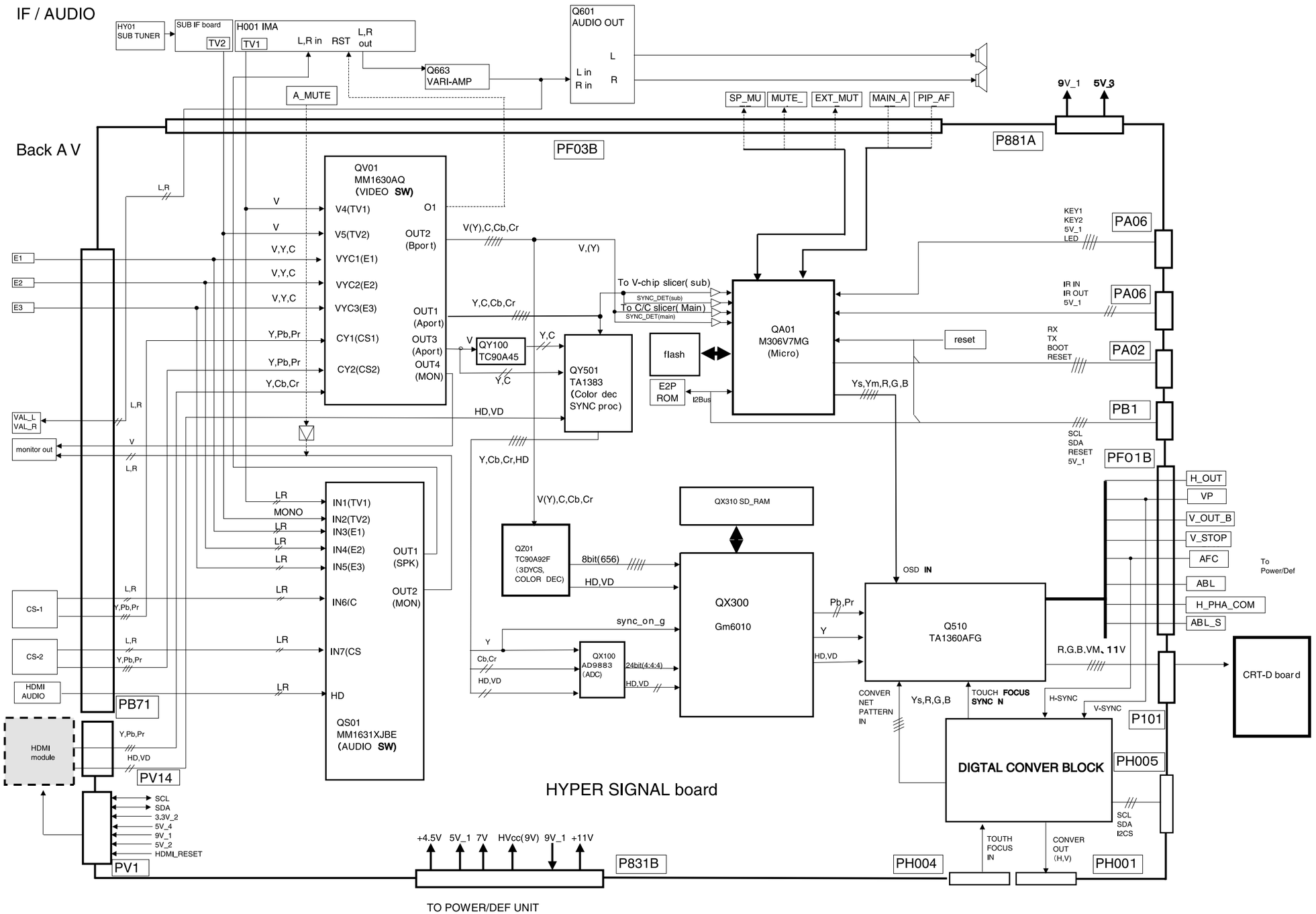
1. RESISTOR Resistance is shown in ohm [K = 1.000, M = 1.000.000]. All resistors are 1/6W and 5% tolerance carbon resistor, unless otherwise noted as the following marks.
   1/2R = Metal or Metal oxide of 1/2 watt
   1/2S = Carbon compsistion of 1/2 watt
   1RF = Fuse resistor of 1 watt
   10W = Cement of 10 watt
   K = ±10% G = ±2% F = ±1%
2. CAPACITOR Unless otherwise noted in schematic, all capacitor values less than 1 are expressed in μF, and the values more than 1 in pF.
   All capacitors are ceramic 50V, unless otherwise noted as the following marks.

    Electolytic capacitor  Mylar capacitor
3. The parts indicated with "⚠" have special characteristics, and should be replaced with identical parts only.
4. Voltages read with DIGITAL MULTI-METER from point indicated to chassing ground, using a color bar signal with all controls at normal, line voltage at 220 volts.
5. Waveforms are taken receiving color bar signal with enough sensitivity.
6. Voltage reading shown are nominal values and may vary ±20% except H.V.

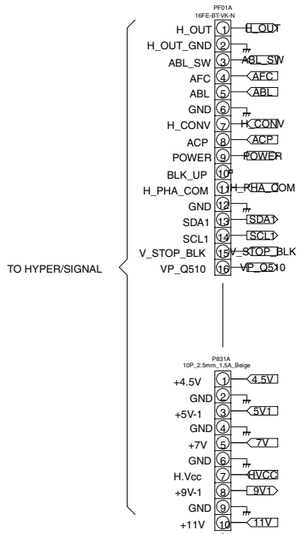
## ■ SCHEMATIC DIAGRAM STRUCTURE:

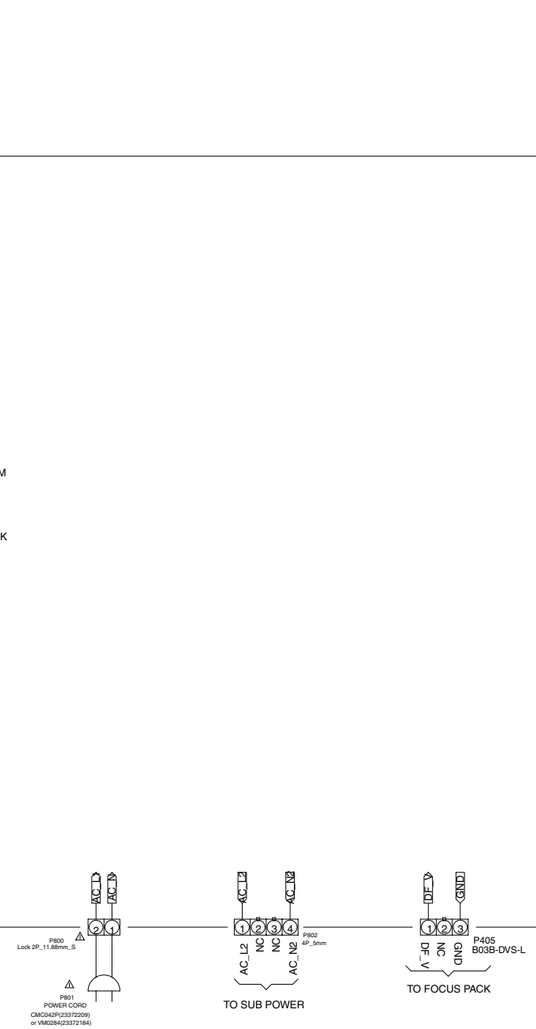

- DEF POWER Circuit
  - (1/3) [ SHEET - 1/3] ..... 1/61
  - (2/3) [ SHEET - 2/3] ..... 2/61
  - (3/3) [ SHEET - 3/3] ..... 3/61
- BACK/AV (51H84, 57H84) Circuit ..... 4/61
- BACK/AV (46H84) Circuit ..... 5/61
- CONV/IF/AUDIO
  - (1/3) [ SHEET - 1/3] ..... 6/61
  - (2/3) [ SHEET - 2/3] ..... 7/61
  - (3/3) [ SHEET - 3/3] ..... 8/61
- CONVER OUT Circuit ..... 9/61
- FRONT IN/CONT/REMOVE Circuit ..... 10/61
- CRT-D Circuit
  - (1/2) [ SHEET - 1/2] .....11/61
  - (2/2) [ SHEET - 2/2] .....12/61
- AV Circuit
  - (1/10) [ SHEET - 1/10] .....13/61
  - (2/10) [ SHEET - 2/10] .....14/61
  - (3/10) [ SHEET - 3/10] .....15/61
  - (4/10) [ SHEET - 4/10] .....16/61
  - (5/10) [ SHEET - 5/10] .....17/61
  - (6/10) [ SHEET - 6/10] .....18/61
  - (7/10) [ SHEET - 7/10] .....19/61
  - (8/10) [ SHEET - 8/10] .....20/61
  - (9/10) [ SHEET - 9/10] .....21/61
  - (10/10) [ SHEET - 10/10] .....22/61
- MICON Circuit
  - (1/10) [ SHEET - 1/10] .....23/61
  - (2/10) [ SHEET - 2/10] .....24/61
  - (3/10) [ SHEET - 3/10] .....25/61
  - (4/10) [ SHEET - 4/10] .....26/61
  - (5/10) [ SHEET - 5/10] .....27/61
  - (6/10) [ SHEET - 6/10] .....28/61
  - (7/10) [ SHEET - 7/10] .....29/61
  - (8/10) [ SHEET - 8/10] .....30/61
  - (9/10) [ SHEET - 9/10] .....31/61
  - (10/10) [ SHEET - 10/10] ..... 32/61
- G-HYPER Circuit
  - (1/3) [ SHEET - 1/3] .....33/61
  - (2/3) [ SHEET - 2/3] .....34/61
  - (3/3) [ SHEET - 3/3] .....35/61
- AD-CONVERTER Circuit
  - (A) [ SHEET - 1/3] .....36/61
  - (B) [ SHEET - 2/3] .....37/61
  - (C) [ SHEET - 3/3] .....38/61
- GC-TC90A92A Circuit
  - (1/3) [ SHEET - 1/3] .....39/61
  - (2/3) [ SHEET - 2/3] .....40/61
- GC-REG Circuit ..... 41/61
- GC-TC90A92A Circuit
  - (3/3) [ SHEET - 3/3] .....42/61
- GNESIS Circuit
  - (1/3) [ SHEET - 1/3] .....43/61
  - (2/3) [ SHEET - 2/3] .....44/61
  - (3/3) [ SHEET - 3/3] .....45/61
- SDRAM Circuit ..... 46/61
- GNESIS OUT Circuit ..... 47/61
- GNESIS REG Circuit ..... 48/61
- CPU Circuit ..... 49/61
- DIGITAL CONVER Circuit
  - (1/8) [ SHEET - 1/8] .....50/61
  - (2/8) [ SHEET - 2/8] .....51/61
  - (3/8) [ SHEET - 3/8] .....52/61
  - (4/8) [ SHEET - 4/8] .....53/61
  - (5/8) [ SHEET - 5/8] .....54/61
  - (6/8) [ SHEET - 6/8] .....55/61
  - (7/8) [ SHEET - 7/8] .....56/61
  - (8/8) [ SHEET - 8/8] .....57/61
- CONVER-REG Circuit
  - (1/4) [ SHEET - 1/4] .....58/61
  - (2/4) [ SHEET - 2/4] .....59/61
  - (3/4) [ SHEET - 3/4] .....60/61
  - (4/4) [ SHEET - 4/4] .....61/61

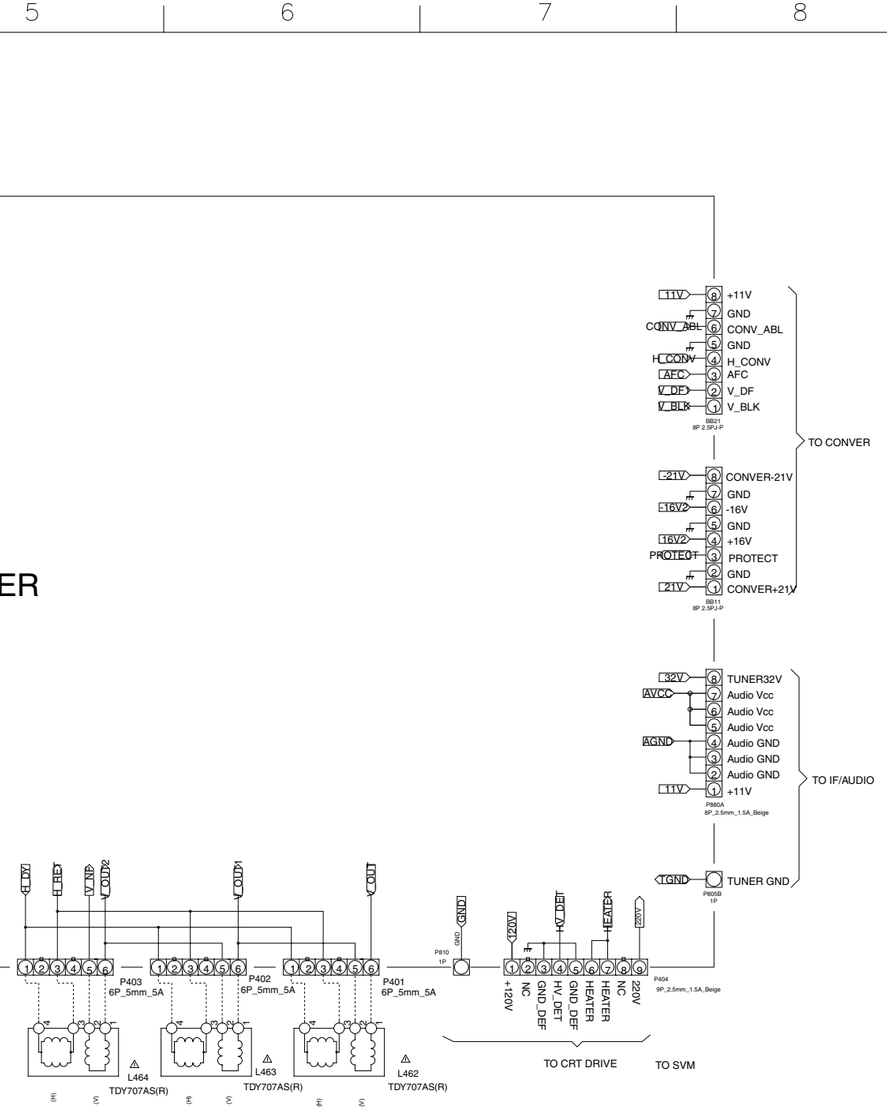
# CIRCUIT BLOCK DIAGRAM



# DEF/POWER



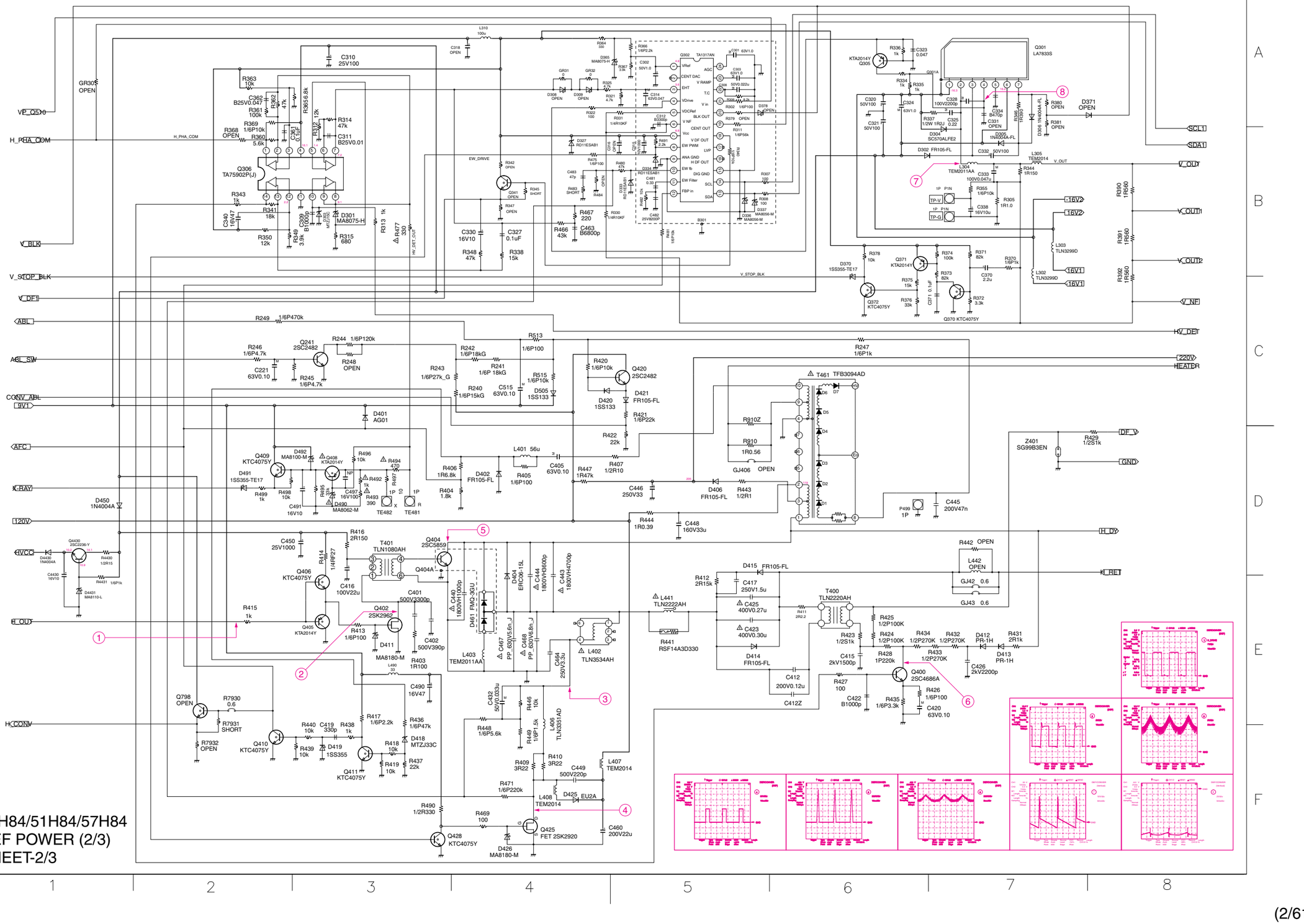







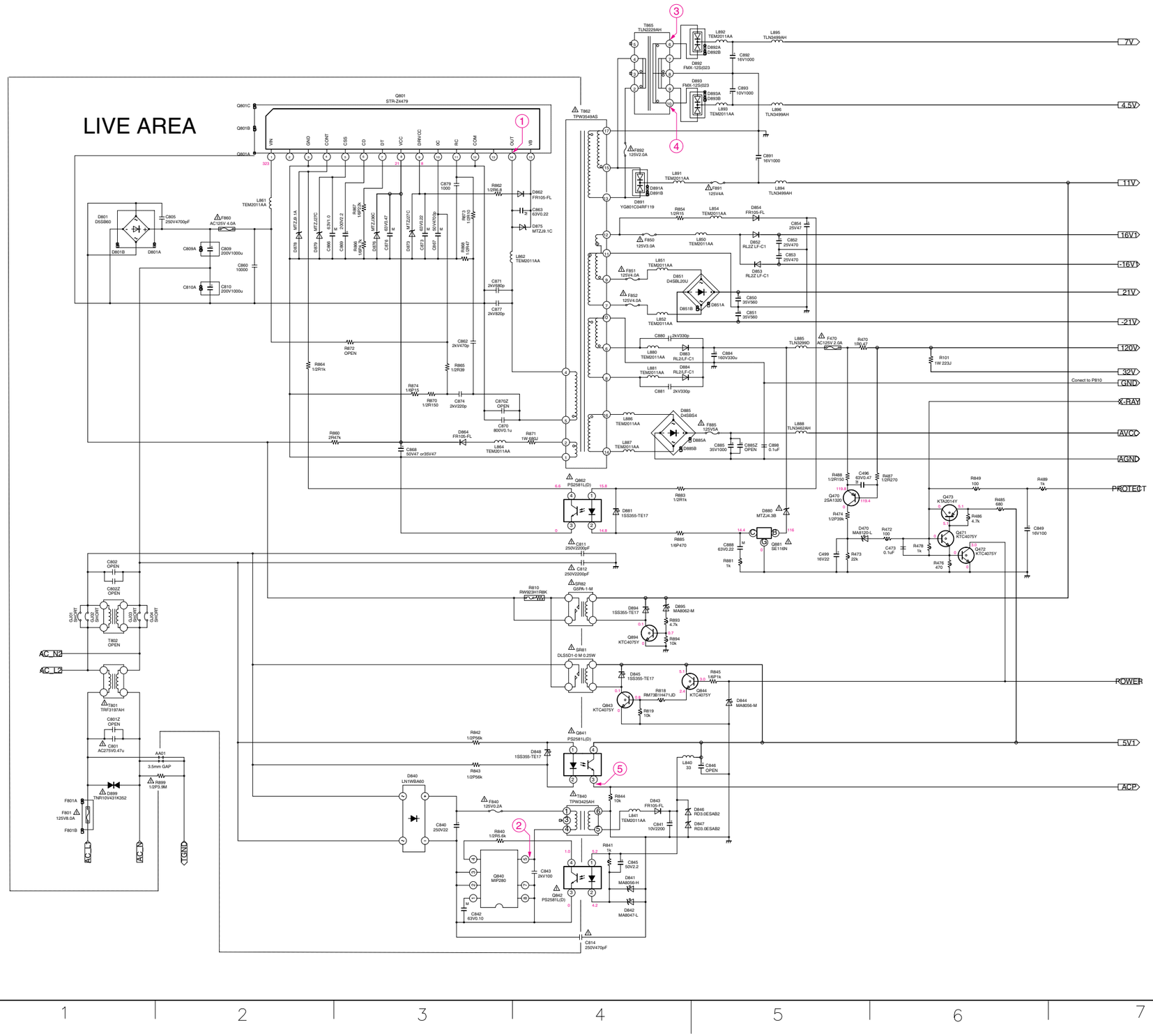



46H84/51H84/57H84
DEF POWER (1/3)
SHEET-1/3

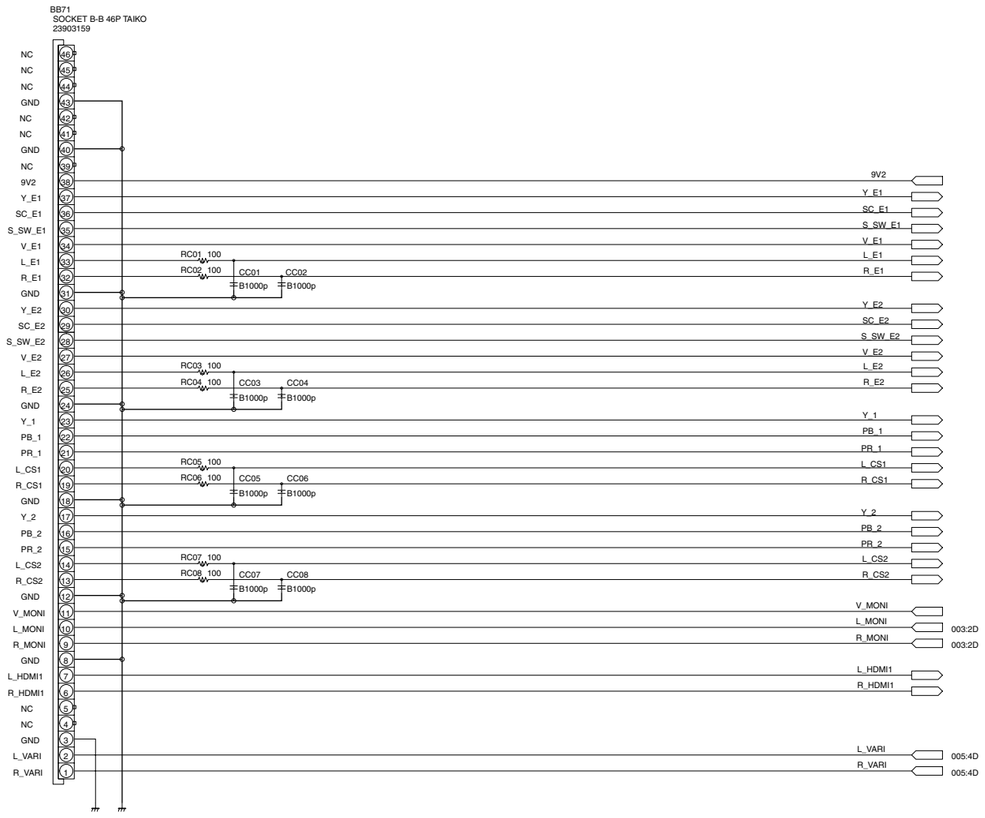

VP_Q5V0
H_PHA_COM
V_BLK
V_STOP_BLK
V_DF1
ABL
AGL_SW
CONV_ABL
9V1
AFC
X-RAY
120V
HVCC
H_OUT
H_CONV
H_DRIVE
H_RET
V_OUT
V_OUT1
V_OUT2
V_NF
HV_DET
220V
HEATER
SCL1
SDA1
DF_V
GND
-16V2
16V2
16V1
46H84/51H84/57H84
DEF POWER (2/3)
SHEET-2/3

(2/61)

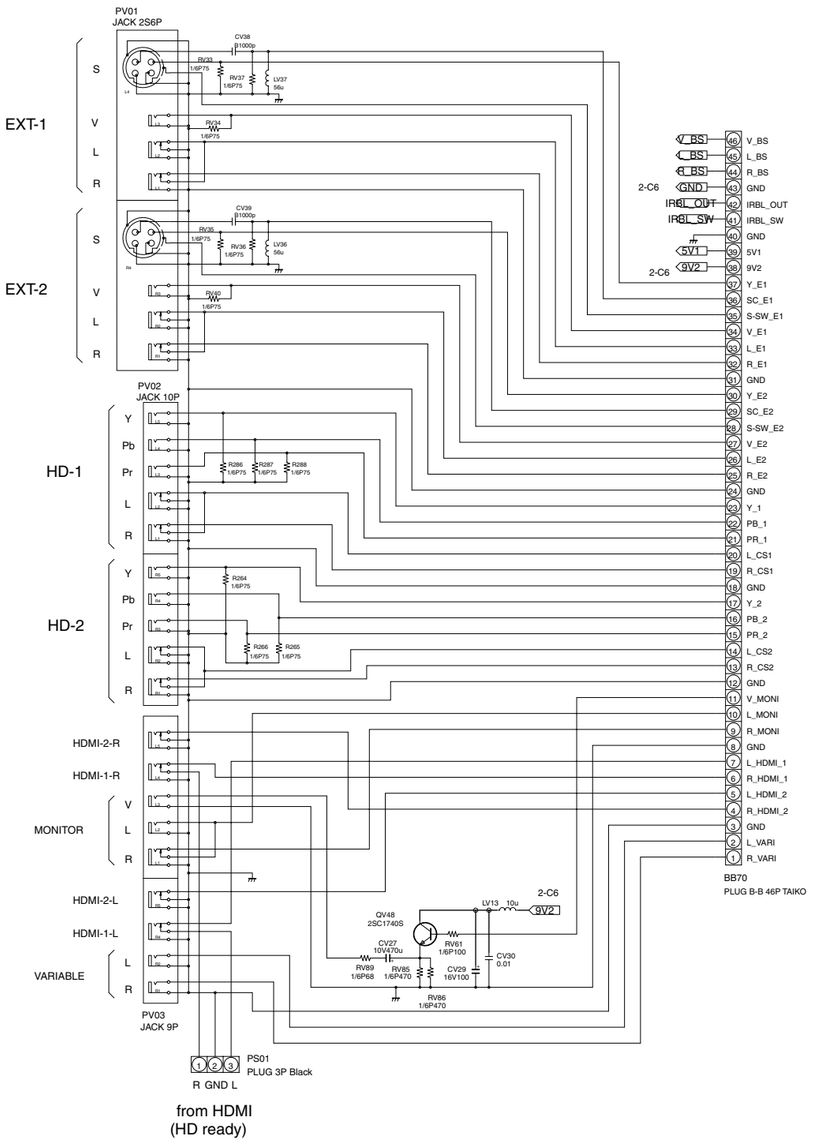
# LIVE AREA




46H84/51H84/57H84
DEF POWER (3/3)
SHEET-3/3




46H84/51H84/57H84
BACK/AV (51H84, 57H84)




46H84/51H84/57H84
BACK/AV (46H84)

# IF/AUDIO

PF03A
29FE-BT-VK-N

| | | |
|---|---|---|
| V_TV | 1 | V_TV |
| TUNER GND | 2 | GND |
| TVGND | 3 | TVGND |
| TUNER GND | 4 | GND |
| RESET_IMA | 5 | RESET_IMA |
| V_TV2 | 6 | V_TV2 |
| GND | 7 | GND |
| TV2GND | 8 | TV2G |
| R_TV | 9 | R_TV |
| AFT2 | 10 | AFT2 |
| AFT1 | 11 | AFT1 |
| GND | 12 | GND |
| L_TV | 13 | L_TV |
| A_TV2 | 14 | A_TV2 |
| GND | 15 | GND |
| MUTE_A | 16 | MUTE_A |
| R_AV | 17 | R_AV |
| A_MUTE | 18 | A_MUTE |
| GND | 19 | GND |
| MUTE_E | 20 | MUTE_E |
| L_AV | 21 | L_AV |
| SP_MUTE | 22 | SP_MUTE |
| GND | 23 | GND |
| R_VARI | 24 | R_VARI |
| SCL1 | 25 | SCL1 |
| NC/10V | 26 | 10V |
| SDA1 | 27 | SDA1 |
| L_VARI | 28 | L_VARI |
| GND_A | 29 | GND_A |

to Hyp.SIGNAL

| | | |
|---|---|---|
| 9V1 | 1 | 9V1 |
| GND | 2 | GND |
| 5V2 | 3 | 5V2 |

P881B
3P_2.5mm_1.5A_BLACK

4-C2

| | | |
|---|---|---|
| 1 | 5V2 | 4-C2 |
| 2 | GND | |
| 3 | 9V1 | |
| 4 | GND | |
| 5 | TUNER32V | |

P882B
PLUG 5P

| | | |
|---|---|---|
| TUNER32V | 8 | TUNER32V |
| A_VCC | 7 | Audio Vcc |
| | 6 | Audio Vcc |
| | 5 | Audio Vcc |
| GND_A | 4 | Audio GND |
| | 3 | Audio GND |
| | 2 | Audio GND |
| 11V_A | 1 | 11V Audio |

P880B
8P_2.5mm_1.5A_Beige

to POWER/DEF

to Hyp.SIGNAL
(D-CONVER block)

| | | |
|---|---|---|
| RV | 16 | RV |
| GH | 15 | GH |
| BH | 14 | BH |
| | 13 | |
| | 12 | |
| CONVER-5V | 11 | -5V |
| | 10 | |
| | 9 | |
| RH | 8 | RH |
| BV | 7 | BV |
| GV | 6 | GV |
| | 5 | |
| | 4 | |
| CONVER+16V | 3 | |
| CONVER+5V | 2 | 5V |
| CONV_RST | 1 | CONV_RST |

BB 16P PLUG
BB60

| | | |
|---|---|---|
| 21V | 1 | CONVER-21V |
| | 2 | |
| -16V | 3 | CONVER-16V |
| | 4 | |
| 16V | 5 | CONVER+16V |
| PROTECT | 6 | PROTECT |
| | 7 | |
| 21V | 8 | CONVER+21V |

BB10
BB 8P BASE SOCKET

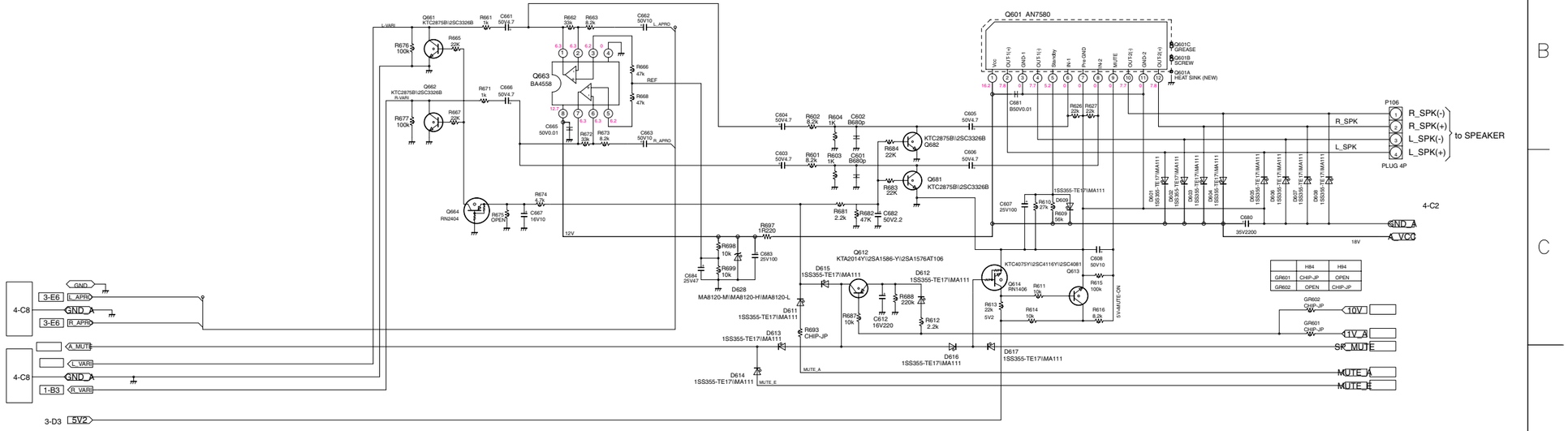
| | | |
|---|---|---|
| 11V | 1 | +11V |
| | 2 | GND |
| CONV_ABL | 3 | CONV_ABL |
| | 4 | GND |
| | 5 | H_CONV |
| | 6 | AFC |
| | 7 | V_DF |
| | 8 | V_BLK |

BB20
BB 8P BASE SOCKET

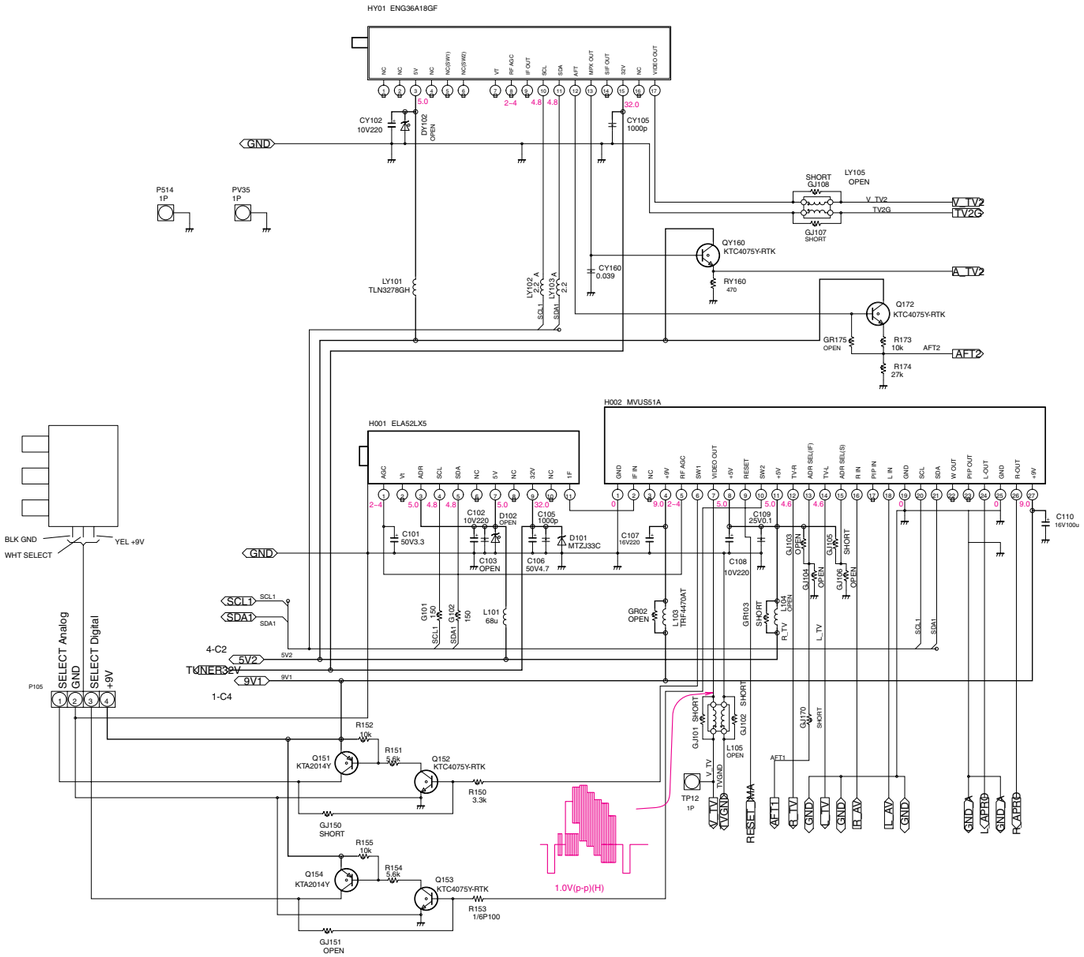
to POWER/DEF

# CONVER OUT

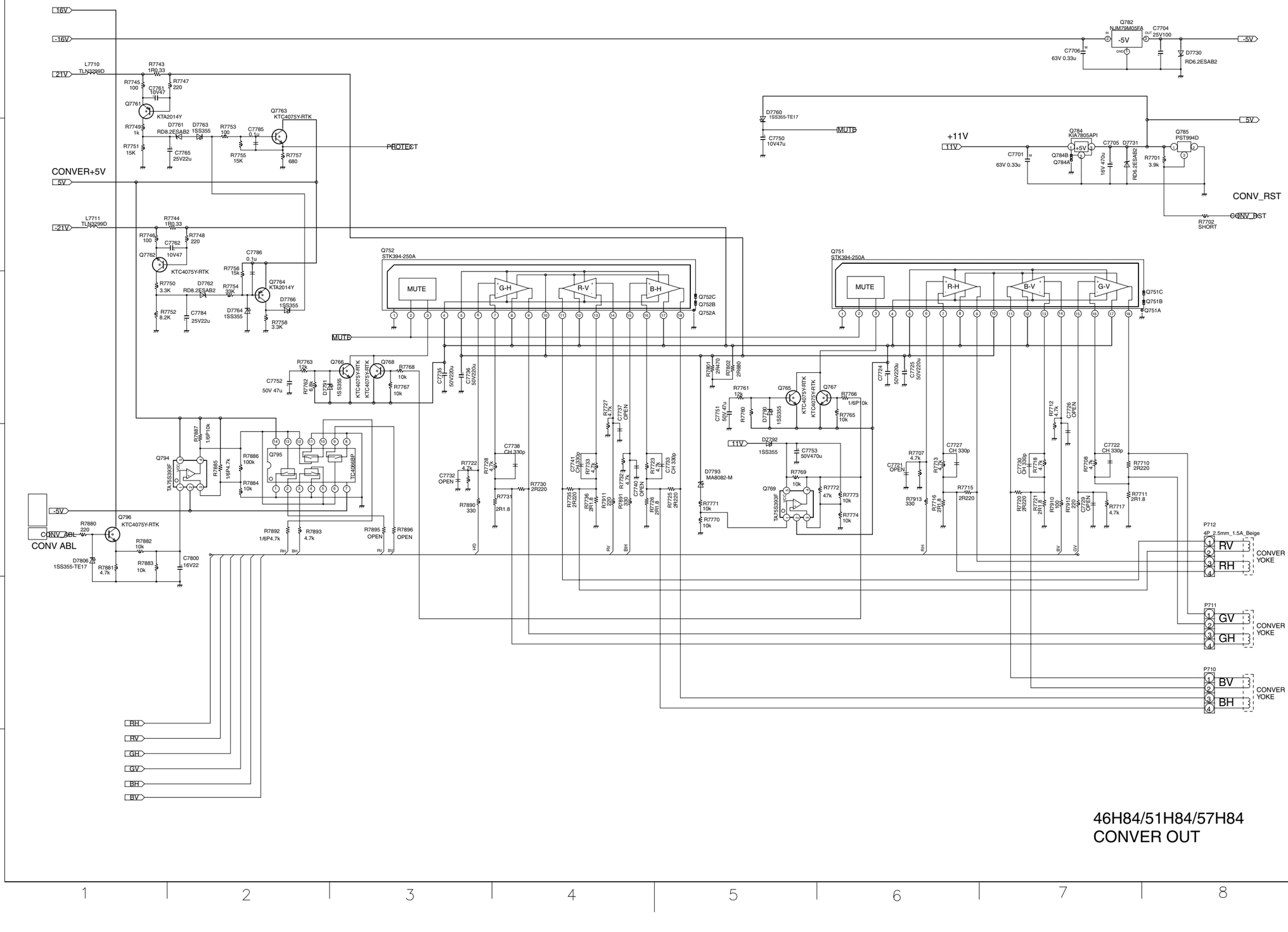
46H84/51H84/57H84
CONV/IF/AUDIO (1/3)
SHEET-1/3

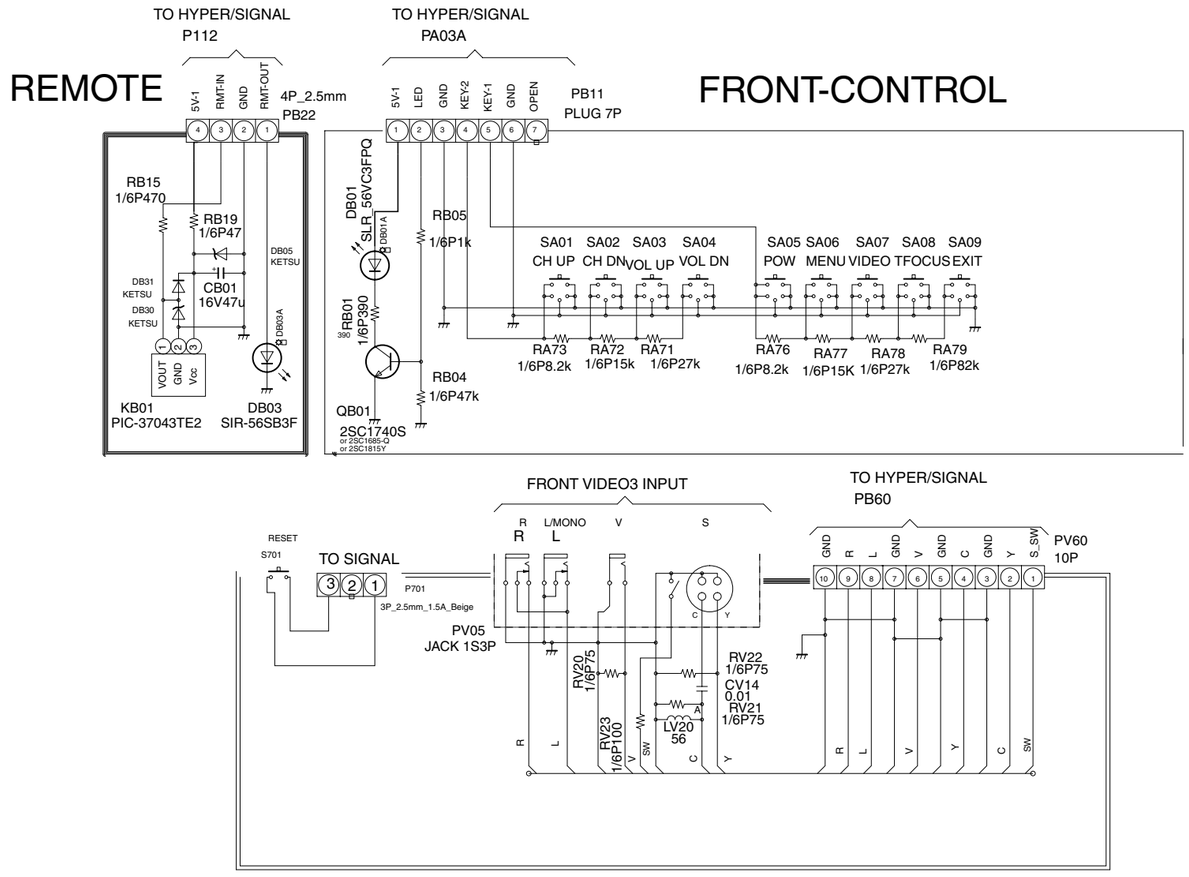



46H84/51H84/57H84
CONV/IF/AUDIO (2/3)
SHEET-2/3




46H84/51H84/57H84
CONV/IF/AUDIO (3/3)
SHEET-3/3

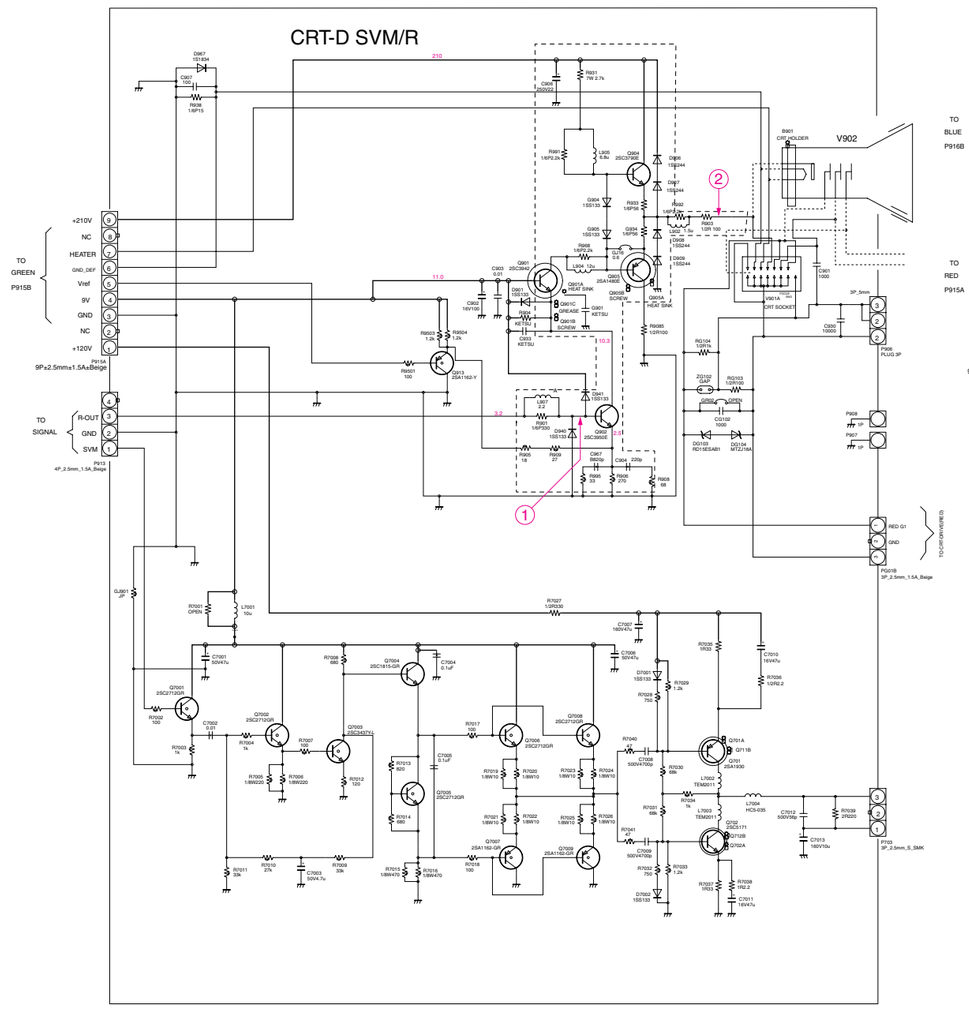

16V
-16V
21V
-21V
5V
-5V
11V
CONVER+5V
CONV ABL
L7710 TLN3299D
L7711 TLN3299D
R7743 1R0,33
R7744 1R0,33
Q7761 KTA2014Y
Q7762 KTC4075Y-RTK
Q7763 KTC4075Y-RTK
Q7764 KTA2014Y
D7761 RD8.2ESAB2
D7762 RD8.2ESAB2
D7763 1SS355
D7764 1SS355
D7766 1SS355
PROTECT
Q752 STK394-250A
Q751 STK394-250A
MUTE
G-H
R-H
B-H
G-V
R-V
B-V
Q752C
Q752B
Q752A
Q751C
Q751B
Q751A
Q766 KTC4075Y-RTK
Q768
Q765 KTC4075Y-RTK
Q767 KTC4075Y-RTK
D7760 1SS355-TE17
D7792 1SS355
D7793 MA8082-M
Q769 TA75S393F
Q782 NJM79M05FA
Q784 KIA7805API
Q785 PST994D
D7730 RD6.2ESAB2
D7731 RD6.2ESAB2
+11V
CONV_RST
R7702 SHORT
Q794 TA75S393F
Q795 TC4066BF
Q796 KTC4075Y-RTK
D7806 1SS355-TE17
C7800 16V22
R7892 1/6P4.7k
R7893 4.7k
R7895 OPEN
R7896 OPEN
RH
RV
GH
GV
BH
BV
P712 4P_2.5mm_1.5A_Beige
P711
P710
CONVER YOKE
46H84/51H84/57H84
CONVER OUT



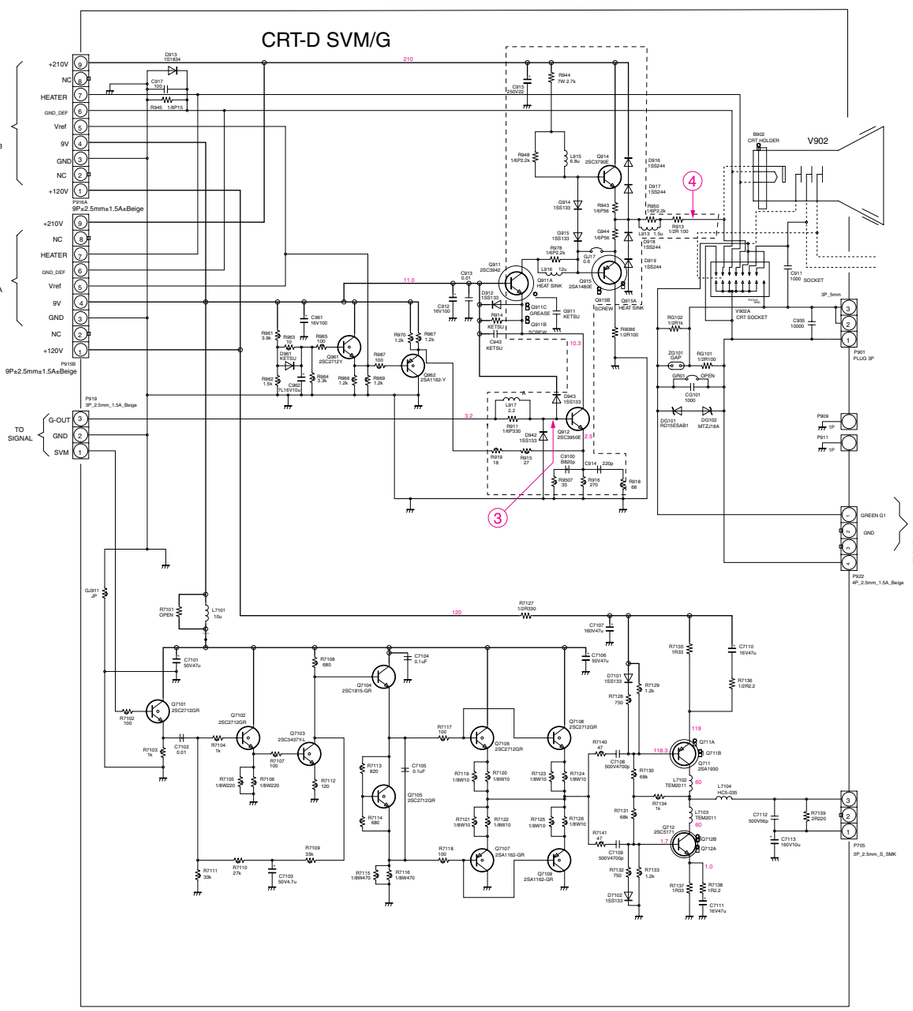

FRONT-IN

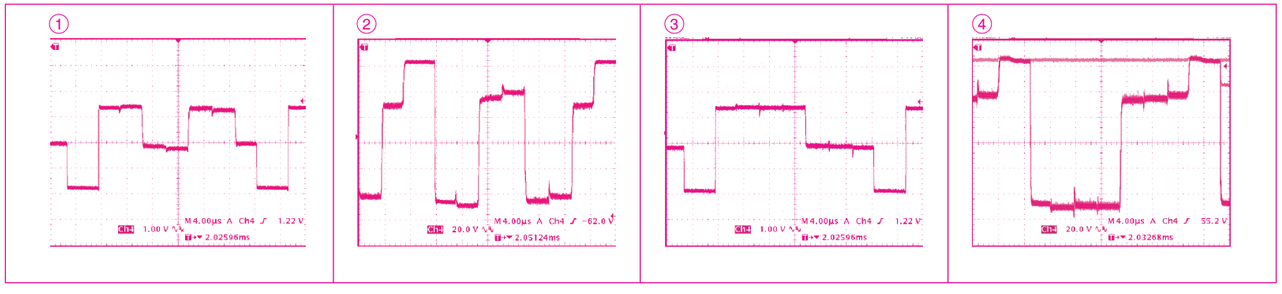
46H84/51H84/57H84
FRONT IN/CONT/REMOTE

## CRT-D SVM/R




## CRT-D SVM/G

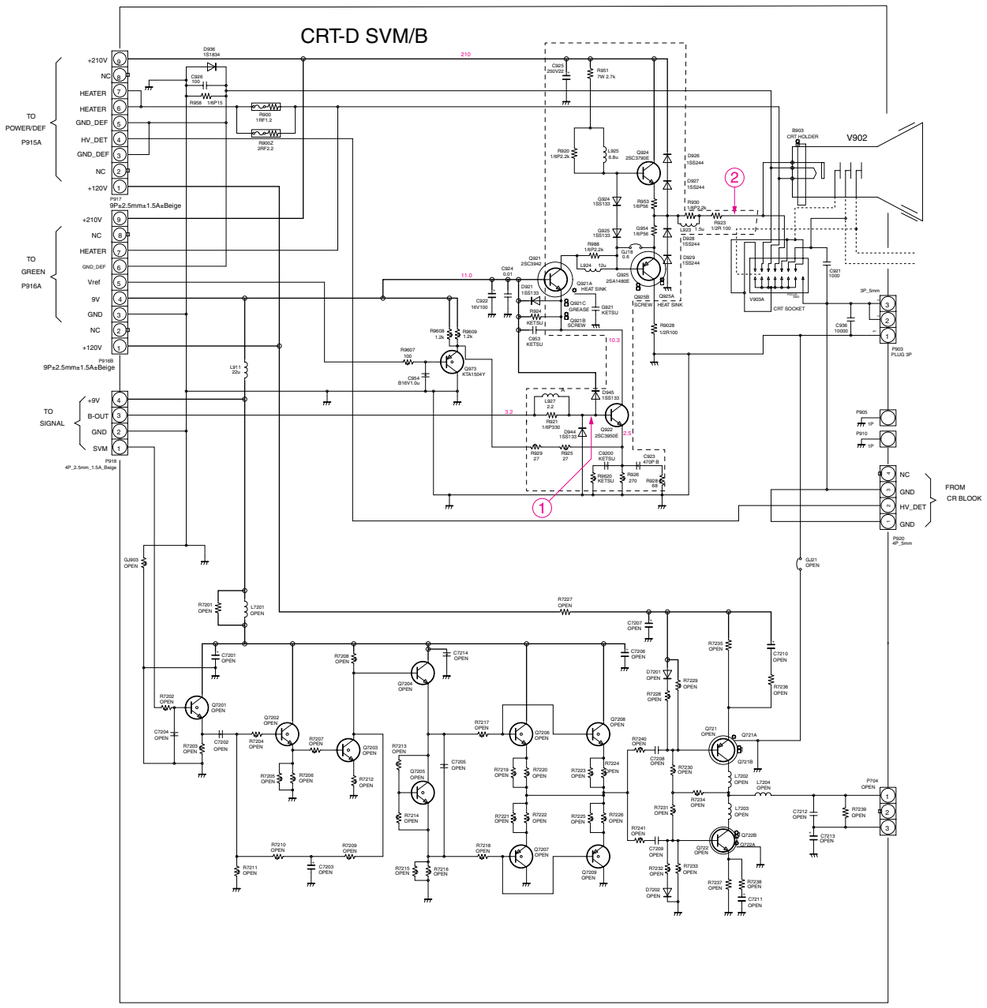


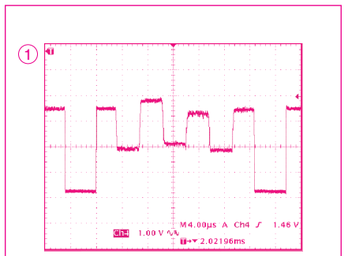



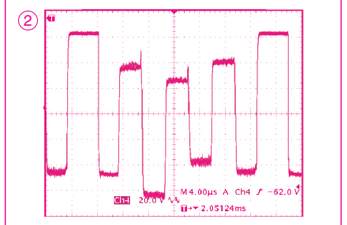

46H84/51H84/57H84
CRT-D (1/2)
SHEET-1/2

(11/61)

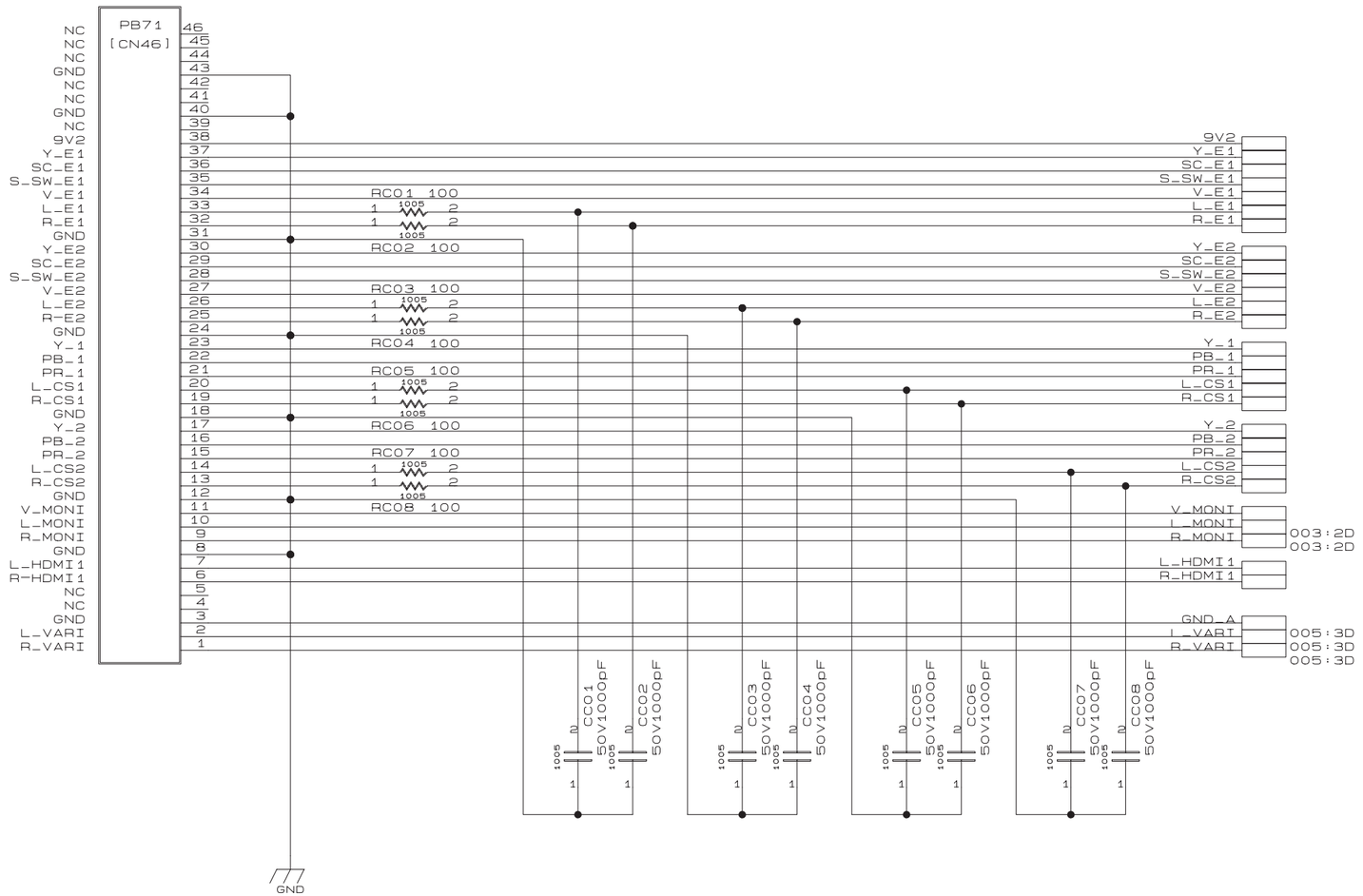
# CRT-D SVM/B



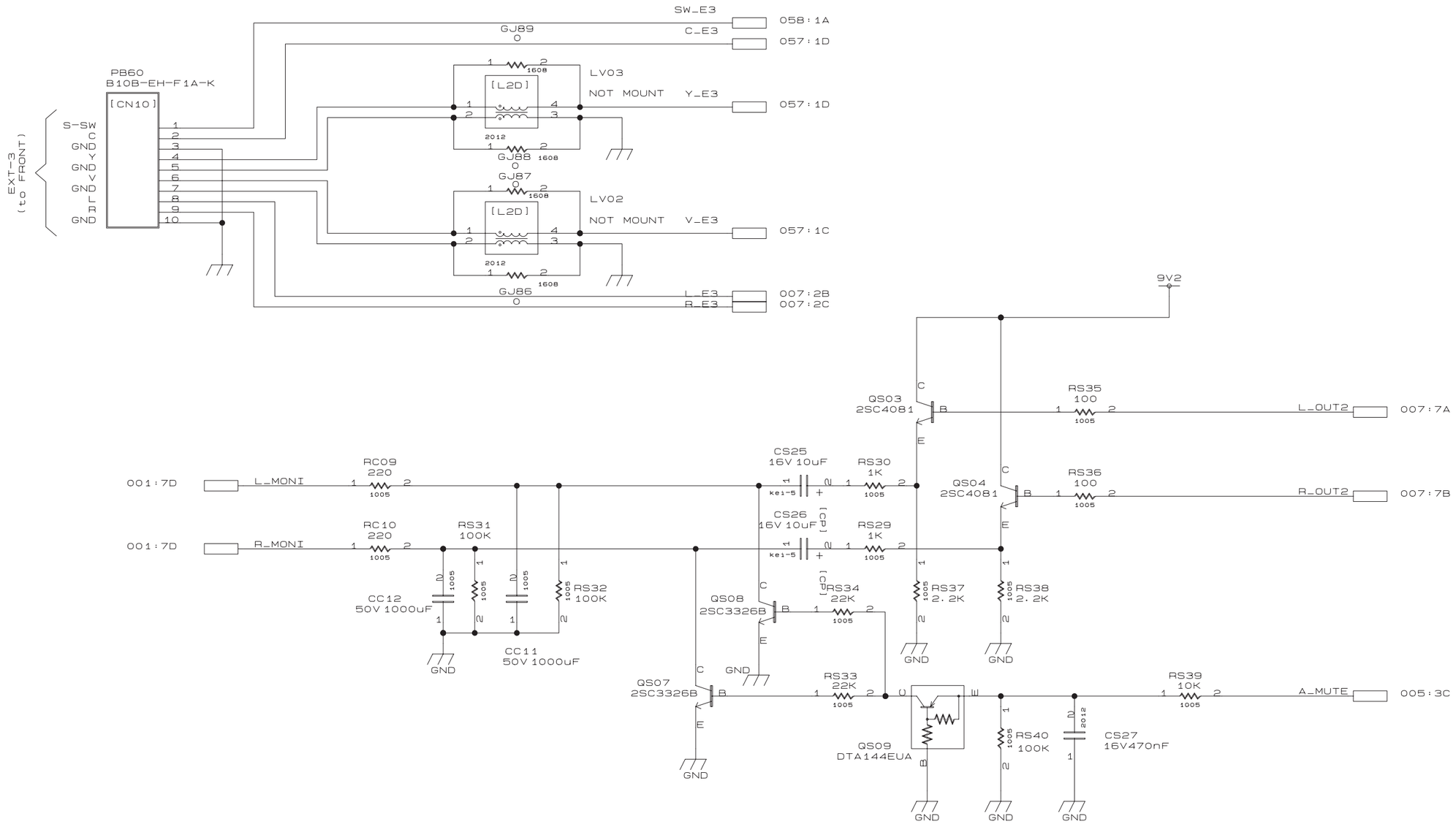



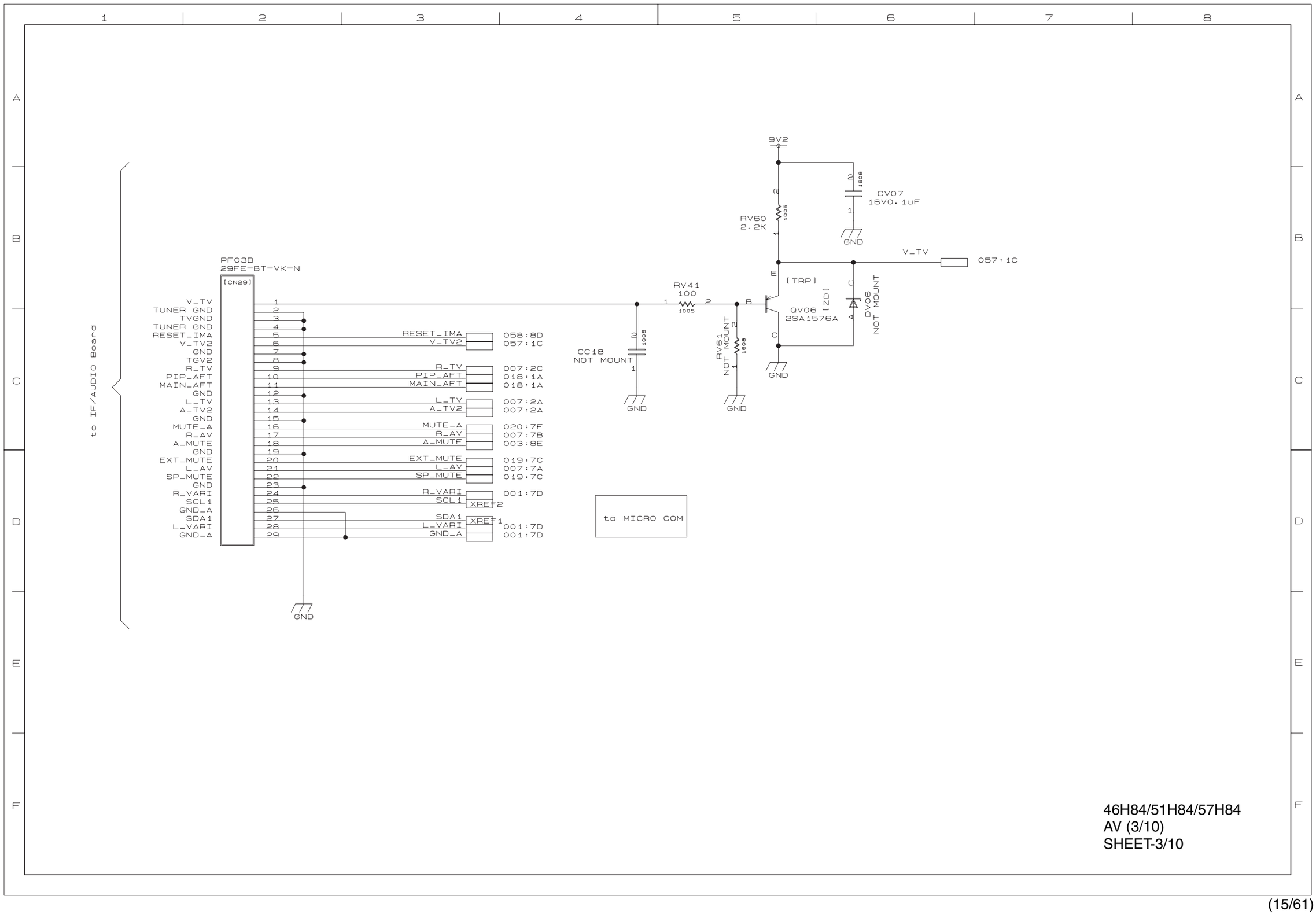

46H84/51H84/57H84
CRT-D (2/2)
SHEET-2/2



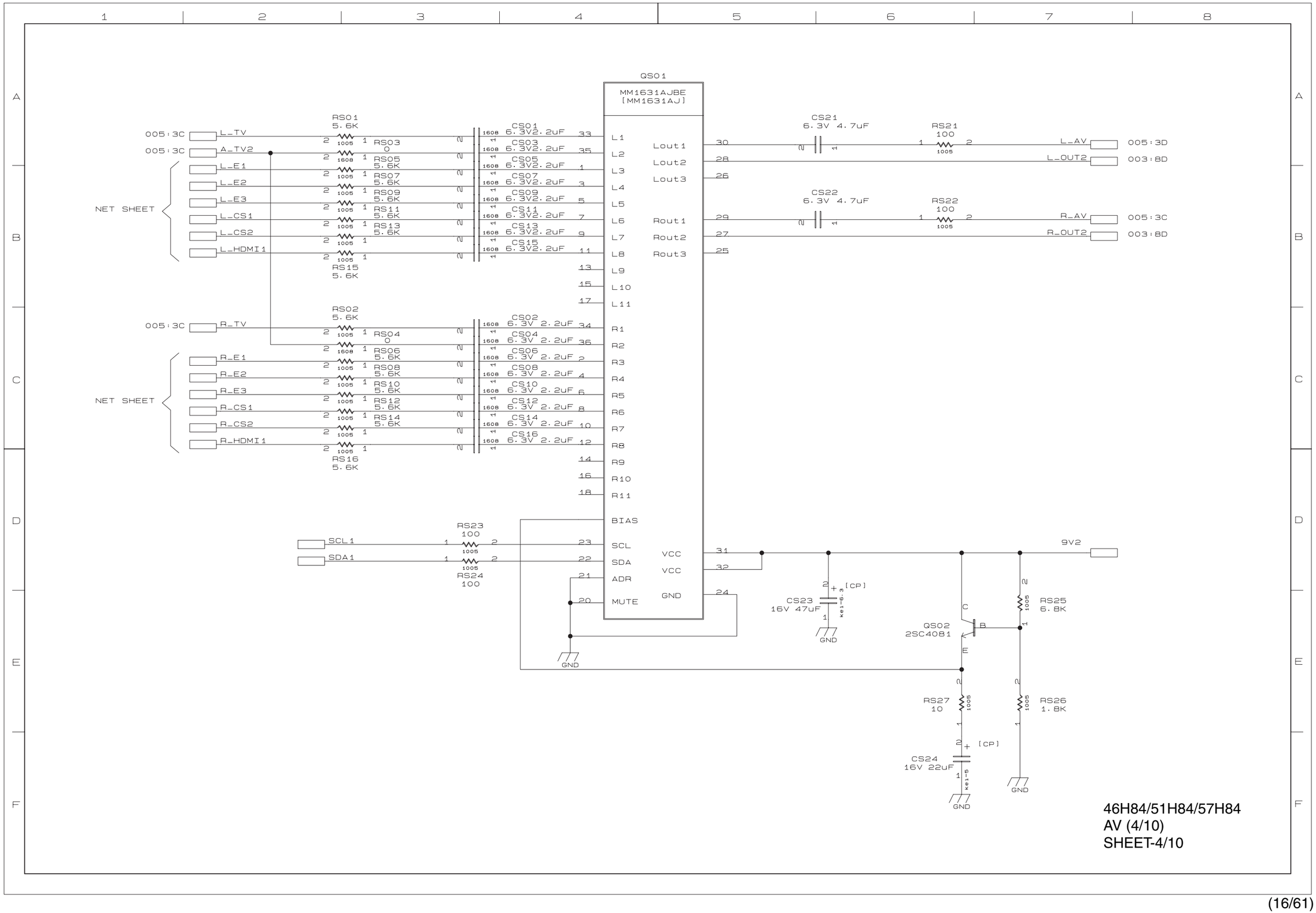

46H84/51H84/57H84
AV (1/10)
SHEET-1/10

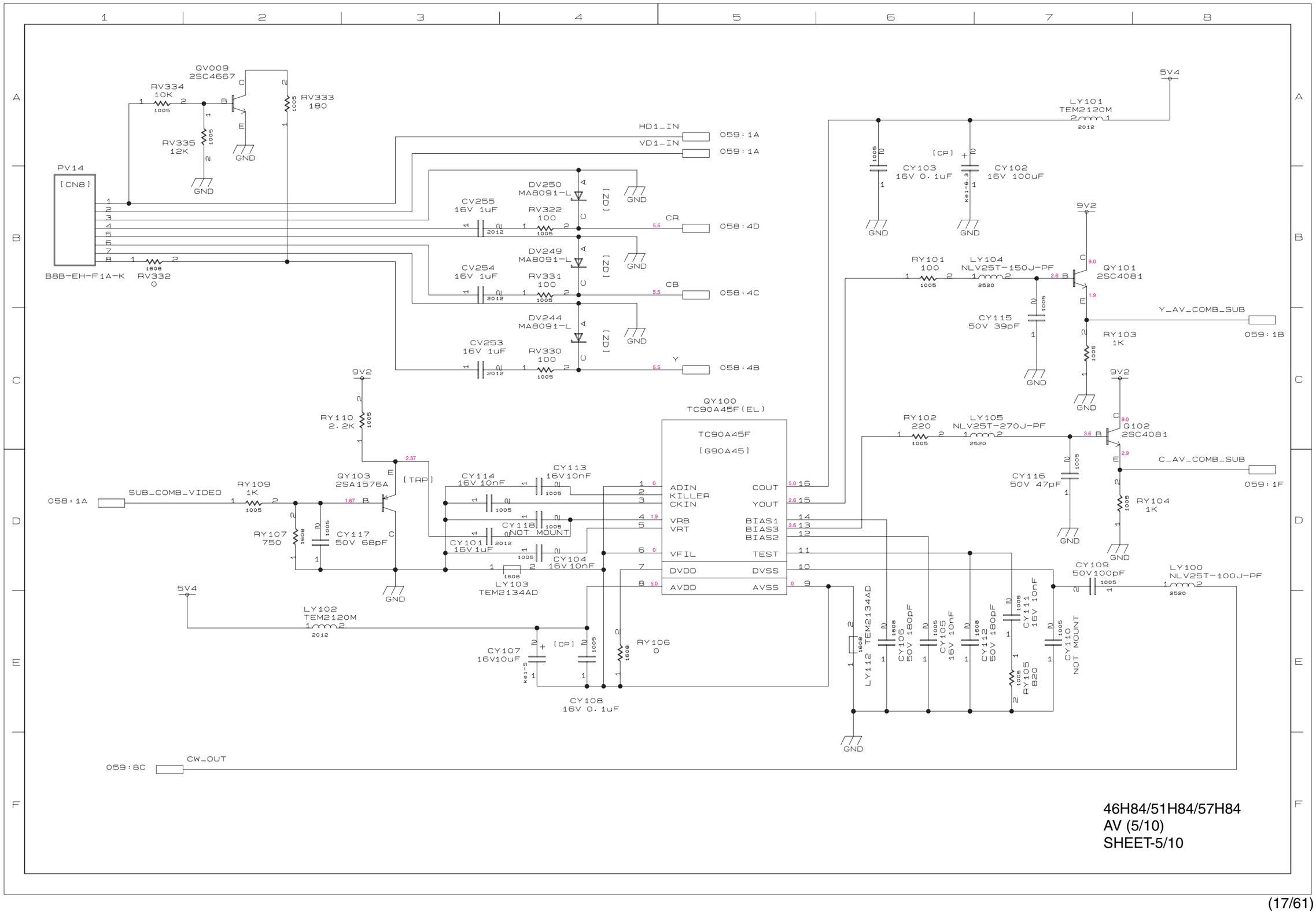


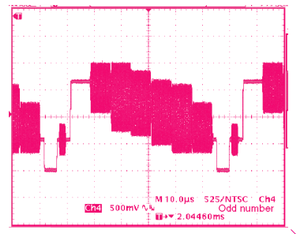

46H84/51H84/57H84
AV (2/10)
SHEET-2/10




46H84/51H84/57H84
AV (3/10)
SHEET-3/10


QS01
MM1631AJBE
[MM1631AJ]
005:3C L_TV
005:3C A_TV2
L_E1
L_E2
L_E3
L_CS1
L_CS2
L_HDMI1
NET SHEET
R_TV
R_E1
R_E2
R_E3
R_CS1
R_CS2
R_HDMI1
NET SHEET
RS01 5.6K
RS02 5.6K
RS03 0
RS04 0
RS05 5.6K
RS06 5.6K
RS07 5.6K
RS08 5.6K
RS09 5.6K
RS10 5.6K
RS11 5.6K
RS12 5.6K
RS13 5.6K
RS14 5.6K
RS15 5.6K
RS16 5.6K
CS01 6.3V2.2uF
CS02 6.3V 2.2uF
CS03 6.3V2.2uF
CS04 6.3V 2.2uF
CS05 6.3V2.2uF
CS06 6.3V 2.2uF
CS07 6.3V2.2uF
CS08 6.3V 2.2uF
CS09 6.3V2.2uF
CS10 6.3V 2.2uF
CS11 6.3V2.2uF
CS12 6.3V 2.2uF
CS13 6.3V2.2uF
CS14 6.3V 2.2uF
CS15 6.3V2.2uF
CS16 6.3V 2.2uF
L1
L2
L3
L4
L5
L6
L7
L8
L9
L10
L11
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
BIAS
SCL
SDA
ADR
MUTE
Lout1
Lout2
Lout3
Rout1
Rout2
Rout3
VCC
VCC
GND
CS21 6.3V 4.7uF
CS22 6.3V 4.7uF
RS21 100
RS22 100
L_AV
L_OUT2
R_AV
R_OUT2
005:3D
003:8D
005:3C
003:8D
RS23 100
RS24 100
SCL1
SDA1
CS23 16V 47uF
[CP]
GND
9V2
QS02 2SC4081
RS25 6.8K
RS26 1.8K
RS27 10
CS24 16V 22uF
[CP]
GND
46H84/51H84/57H84
AV (4/10)
SHEET-4/10


QV009
2SC4667
RV334
10K
RV333
180
RV335
12K
RV332
0
PV14
[CN8]
B8B-EH-F1A-K
GND
HD1_IN
VD1_IN
059:1A
DV250
MA8091-L
DV249
MA8091-L
DV244
MA8091-L
[ZD]
CV255
16V 1uF
CV254
16V 1uF
CV253
16V 1uF
RV322
100
RV331
100
RV330
100
CR
CB
Y
058:4D
058:4C
058:4B
5.5
9V2
RY110
2.2K
QY103
2SA1576A
[TRP]
2.37
1.67
SUB_COMB_VIDEO
058:1A
RY109
1K
RY107
750
CY117
50V 68pF
CY114
16V 10nF
CY113
16V10nF
CY118
NOT MOUNT
CY101
16V1uF
CY104
16V10nF
LY103
TEM2134AD
QY100
TC90A45F(EL)
TC90A45F
[G90A45]
ADIN
KILLER
CKIN
VRB
VRT
VFIL
DVDD
AVDD
COUT
YOUT
BIAS1
BIAS3
BIAS2
TEST
DVSS
AVSS
5V4
LY102
TEM2120M
CY107
16V10uF
[CP]
CY108
16V 0.1uF
RY106
0
LY112 TEM2134AD
CY106
50V 180pF
CY105
16V 10nF
CY112
50V 180pF
CY111
16V 10nF
RY105
820
CY110
NOT MOUNT
CY109
50V100pF
LY100
NLV25T-100J-PF
LY101
TEM2120M
CY103
16V 0.1uF
[CP]
CY102
16V 100uF
RY101
100
LY104
NLV25T-150J-PF
QY101
2SC4081
CY115
50V 39pF
RY103
1K
Y_AV_COMB_SUB
059:1B
RY102
220
LY105
NLV25T-270J-PF
Q102
2SC4081
CY116
50V 47pF
RY104
1K
C_AV_COMB_SUB
059:1F
CW_OUT
059:8C
9.0
2.6
1.9
3.6
2.9
46H84/51H84/57H84
AV (5/10)
SHEET-5/10

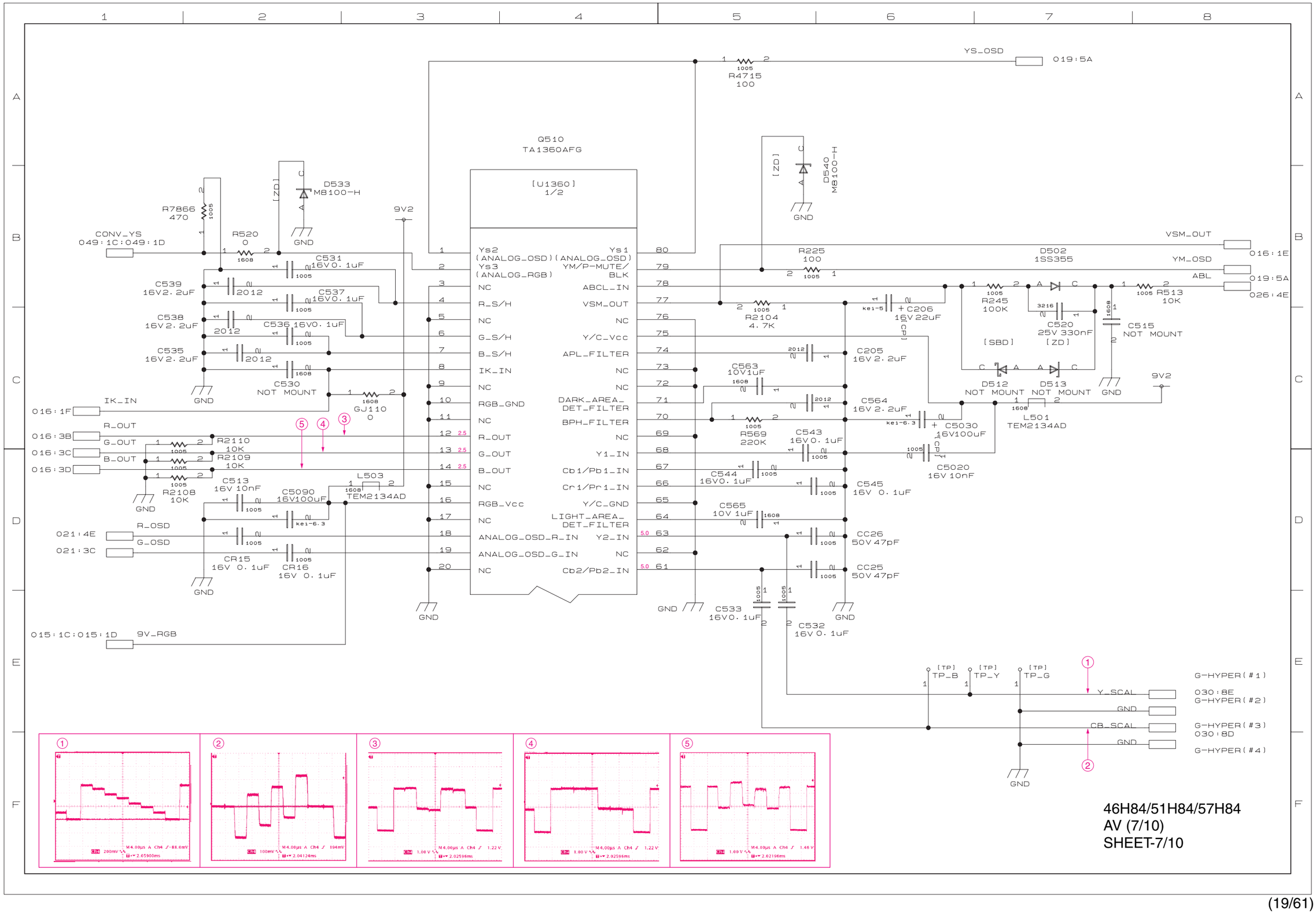


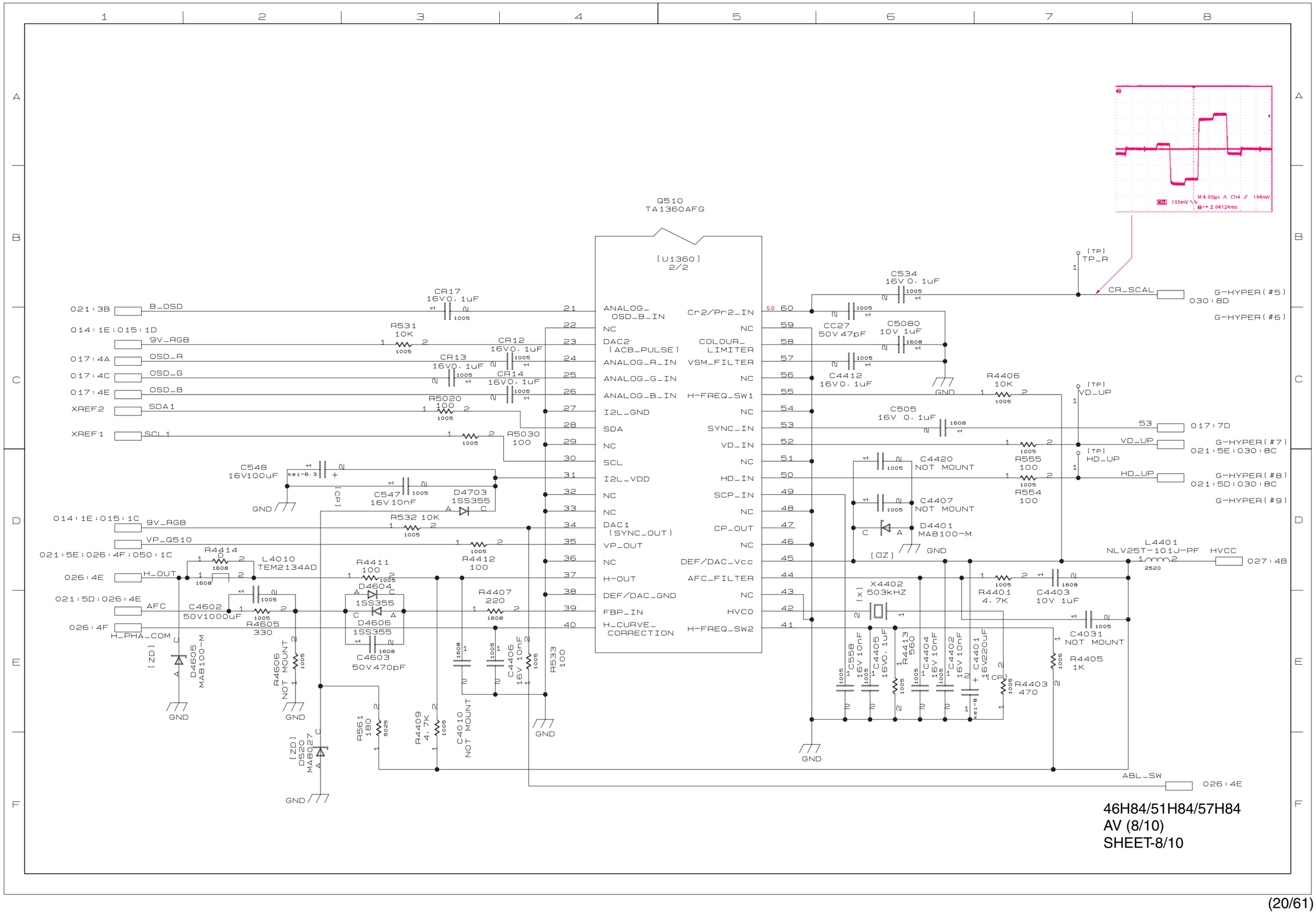

SY_2
RV006 100 1005
QV005 2SC4081
RV005 2.2K 1005
Y_SW1
029:2E
9V2
RV007 2.2K 1005
V_AV_MC
022:1E:025:2B
[TRP]
RV008 100 1608
QV004 2SA1576A
GND
RV003 2.2K 1005
PB_SW1
029:2D
PB_1_2
RV004 100 1005
QV006 2SC4081
RV001 2.2K 1005
PR_SW1
029:2D
PR_1_2
RV002 100 1005
QV007 2SC4081

TC90A92F

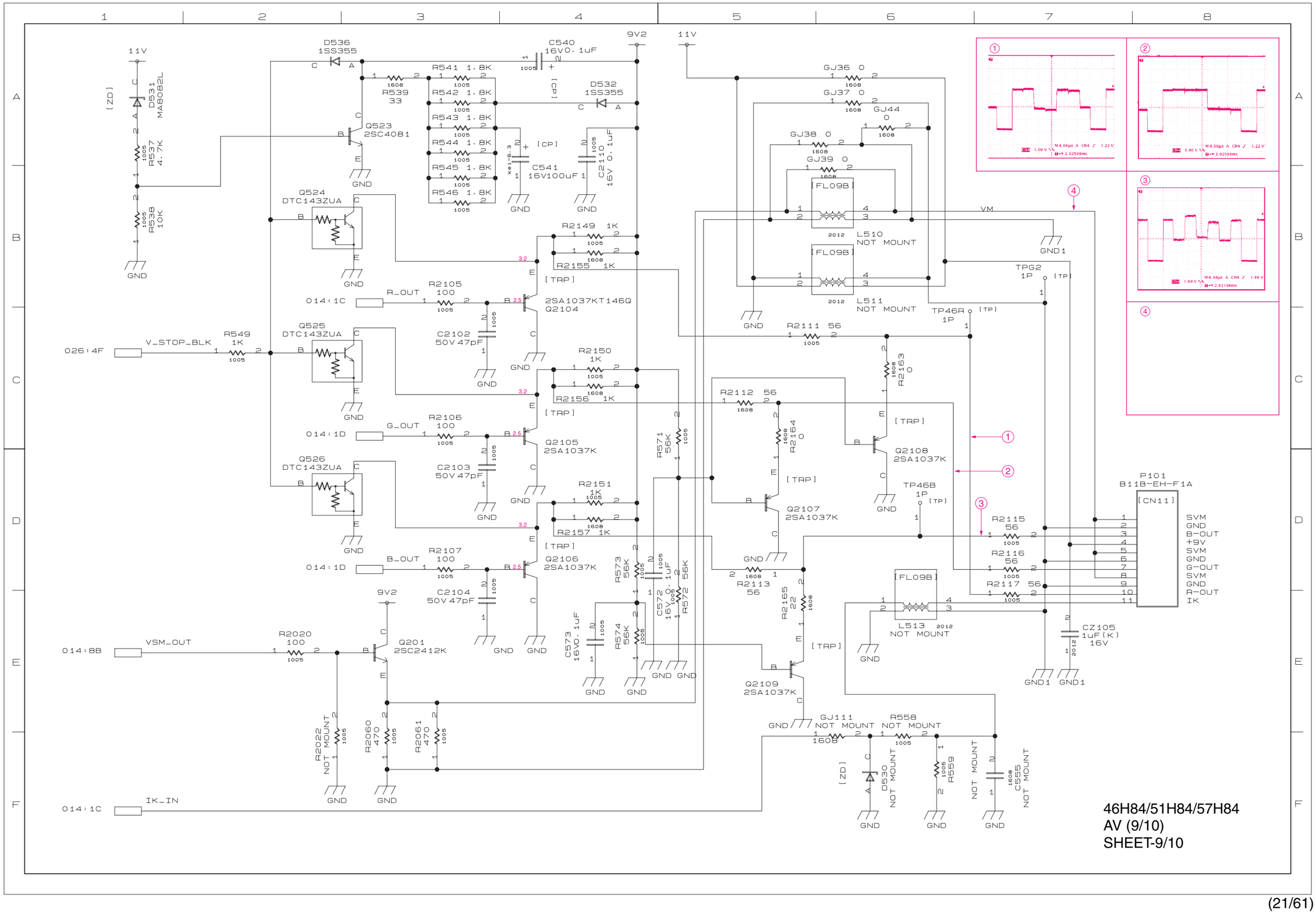
PR_2_2
RV010 100 1005
QV001 2SC4081
RV009 2.2K 1005
PR_SW2
029:2B
PB_2_2
RV012 100 1005
QV002 2SC4081
RV011 2.2K 1005
PB_SW2
029:2B
Y_2_2
RV023 100 1005
QV003 2SC4081
RV013 2.2K 1005
Y_SW2
029:2C
Y_CD_SUB
RV025 100 1608
QV008 2SA1576A
RV024 2.2K 1005
V_SUB_MC
022:5E:025:2D

46H84/51H84/57H84
AV (6/10)
SHEET-6/10

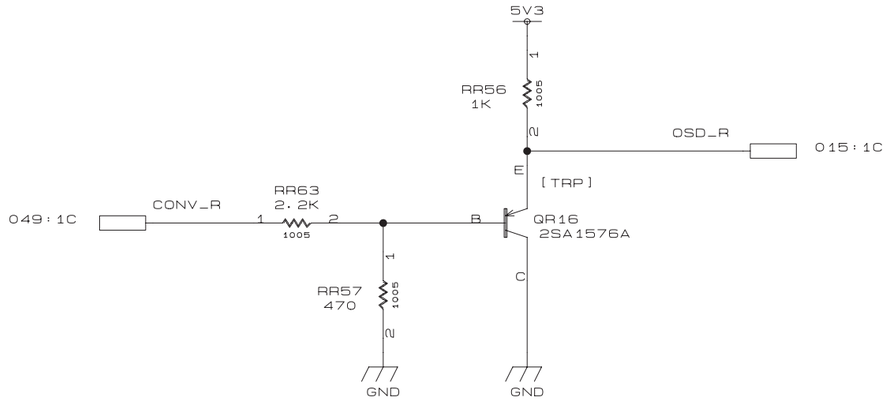

Q510
TA1360AFG
[U1360]
1/2
YS_OSD
019:5A
R4715
100
9V2
D533
M8100-H
[ZD]
GND
R7866
470
CONV_YS
049:1C:049:1D
R520
0
C531
16V0.1uF
C539
16V2.2uF
C537
16V0.1uF
C538
16V2.2uF
C536
16V0.1uF
C535
16V2.2uF
C530
NOT MOUNT
IK_IN
016:1F
GJ110
0
R_OUT
016:3B
G_OUT
016:3C
B_OUT
016:3D
R2110
10K
R2109
10K
R2108
10K
L503
TEM2134AD
C513
16V 10nF
C5090
16V100uF
R_OSD
021:4E
G_OSD
021:3C
CR15
16V 0.1uF
CR16
16V 0.1uF
015:1C:015:1D
9V_RGB
Ys2 (ANALOG_OSD)
Ys3 (ANALOG_RGB)
NC
R_S/H
G_S/H
B_S/H
IK_IN
RGB_GND
R_OUT
G_OUT
B_OUT
RGB_Vcc
ANALOG_OSD_R_IN
ANALOG_OSD_G_IN
Ys1 (ANALOG_OSD)
YM/P-MUTE/BLK
ABCL_IN
VSM_OUT
Y/C_Vcc
APL_FILTER
DARK_AREA_DET_FILTER
BPH_FILTER
Y1_IN
Cb1/Pb1_IN
Cr1/Pr1_IN
Y/C_GND
LIGHT_AREA_DET_FILTER
Y2_IN
Cb2/Pb2_IN
D540
M8100-H
R225
100
R2104
4.7K
C206
16V 22uF
C205
16V 2.2uF
C563
10V1uF
R569
220K
C543
16V0.1uF
C564
16V 2.2uF
C5030
16V100uF
C544
16V0.1uF
C5020
16V 10nF
C545
16V 0.1uF
C565
10V 1uF
CC26
50V 47pF
CC25
50V 47pF
C533
16V0.1uF
C532
16V 0.1uF
D502
1SS355
R245
100K
C520
25V 330nF
C515
NOT MOUNT
D512
NOT MOUNT
D513
NOT MOUNT
L501
TEM2134AD
R513
10K
VSM_OUT
016:1E
YM_OSD
ABL
019:5A
026:4E
[TP] TP_B
[TP] TP_Y
[TP] TP_G
Y_SCAL
CB_SCAL
G-HYPER(#1)
030:8E
G-HYPER(#2)
G-HYPER(#3)
030:8D
G-HYPER(#4)
46H84/51H84/57H84
AV (7/10)
SHEET-7/10

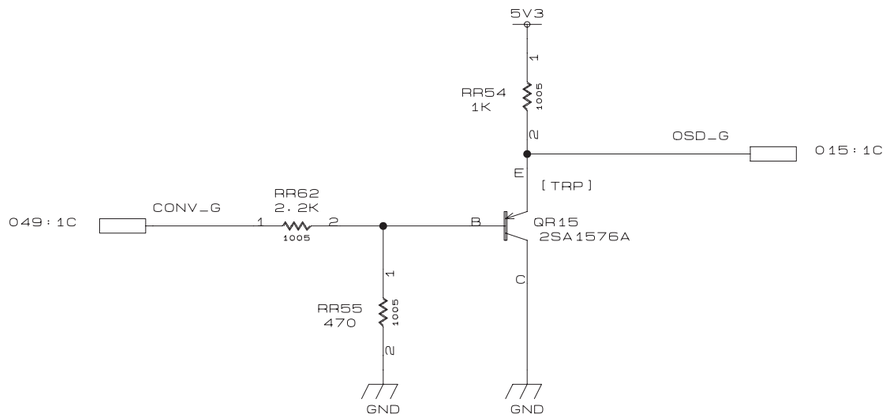


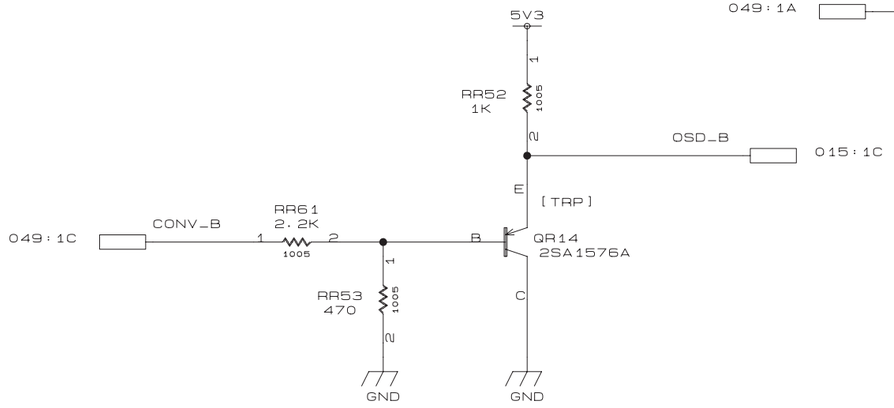

46H84/51H84/57H84
AV (8/10)
SHEET-8/10

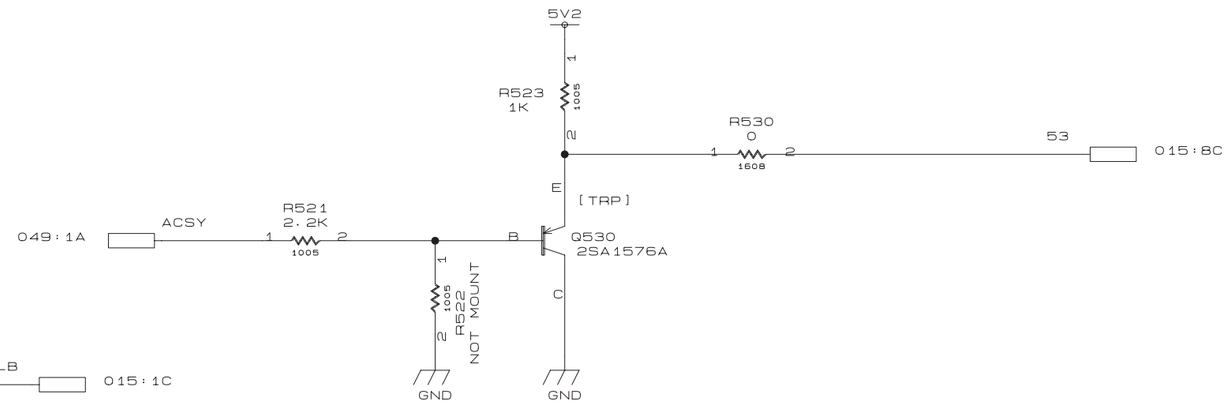

11V
D536
1SS355
C540
16V0.1uF
9V2
11V
R541 1.8K
R542 1.8K
R543 1.8K
R544 1.8K
R545 1.8K
R546 1.8K
R539
33
D532
1SS355
[CP]
[ZD]
D531
MA8082L
R537
4.7K
Q523
2SC4081
R538
10K
C541
16V100uF
C2110
16V 0.1uF
GND
Q524
DTC143ZUA
R2149 1K
R2155 1K
[TRP]
R_OUT
014:1C
R2105
100
Q2104
2SA1037KT146Q
C2102
50V47pF
Q525
DTC143ZUA
V_STOP_BLK
026:4F
R549
1K
R2150
1K
R2156 1K
G_OUT
014:1D
R2106
100
Q2105
2SA1037K
C2103
50V47pF
Q526
DTC143ZUA
R2151
1K
R2157 1K
B_OUT
014:1D
R2107
100
Q2106
2SA1037K
C2104
50V47pF
R573
56K
C572
16V0.1uF
R572
56K
C573
16V0.1uF
R574
56K
9V2
VSM_OUT
014:8B
R2020
100
Q201
2SC2412K
R2022
NOT MOUNT
R2060
470
R2061
470
IK_IN
014:1C
GJ36 0
GJ37 0
GJ44
0
GJ38 0
GJ39 0
FL09B
L510
NOT MOUNT
L511
NOT MOUNT
VM
GND1
TPG2
1P
[TP]
TP46R
1P
R2111 56
R2112 56
R2163
0
R2164
0
R571
56K
Q2108
2SA1037K
Q2107
2SA1037K
TP46B
1P
R2115
56
R2116
56
R2117 56
R2113
56
R2165
22
Q2109
2SA1037K
GJ111
NOT MOUNT
R558
NOT MOUNT
[ZD]
D530
NOT MOUNT
R559
NOT MOUNT
C555
NOT MOUNT
L513
NOT MOUNT
CZ105
1uF(K)
16V
P101
B11B-EH-F1A
[CN11]
SVM
GND
B-OUT
+9V
SVM
GND
G-OUT
SVM
GND
R-OUT
IK
46H84/51H84/57H84
AV (9/10)
SHEET-9/10

(21/61)

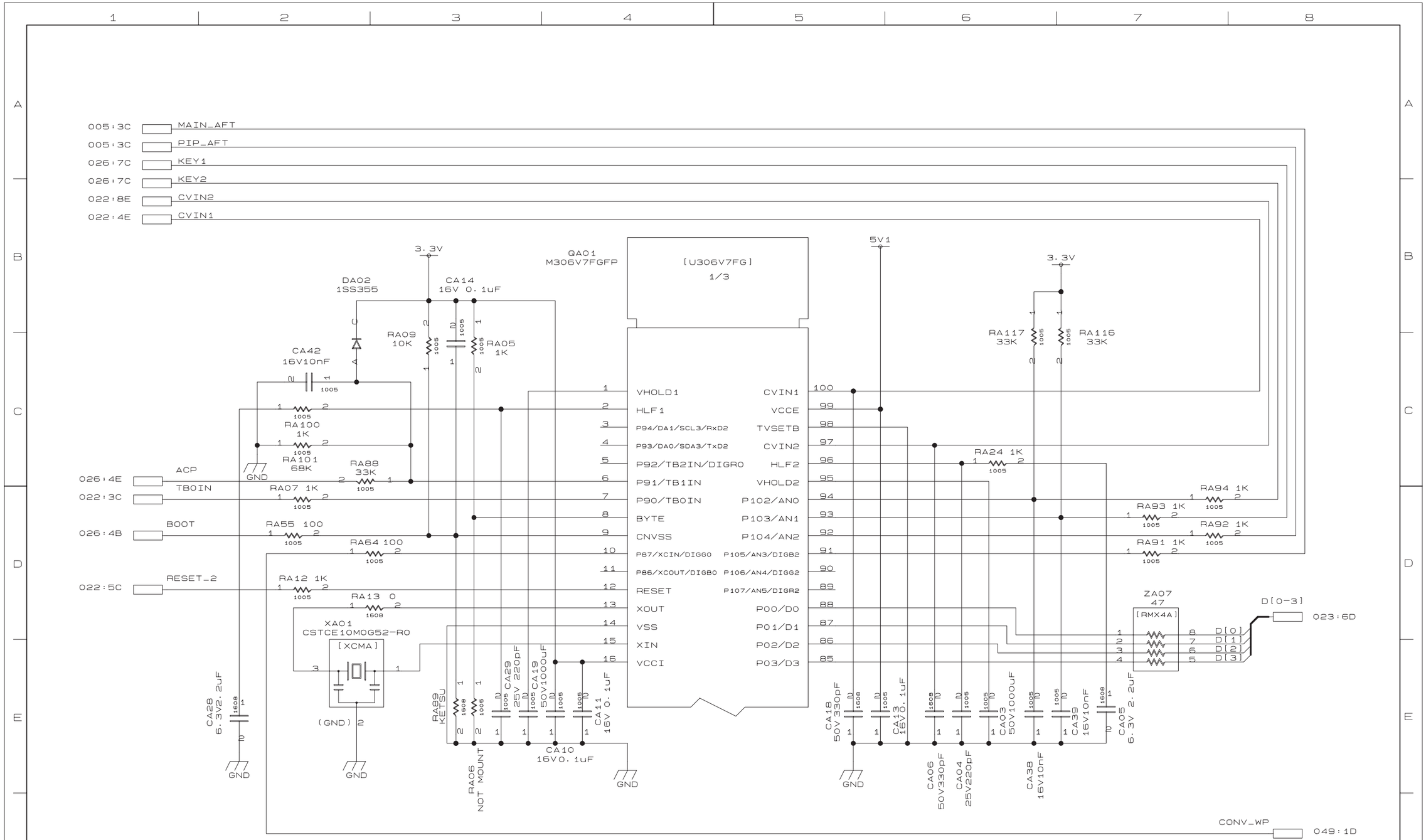


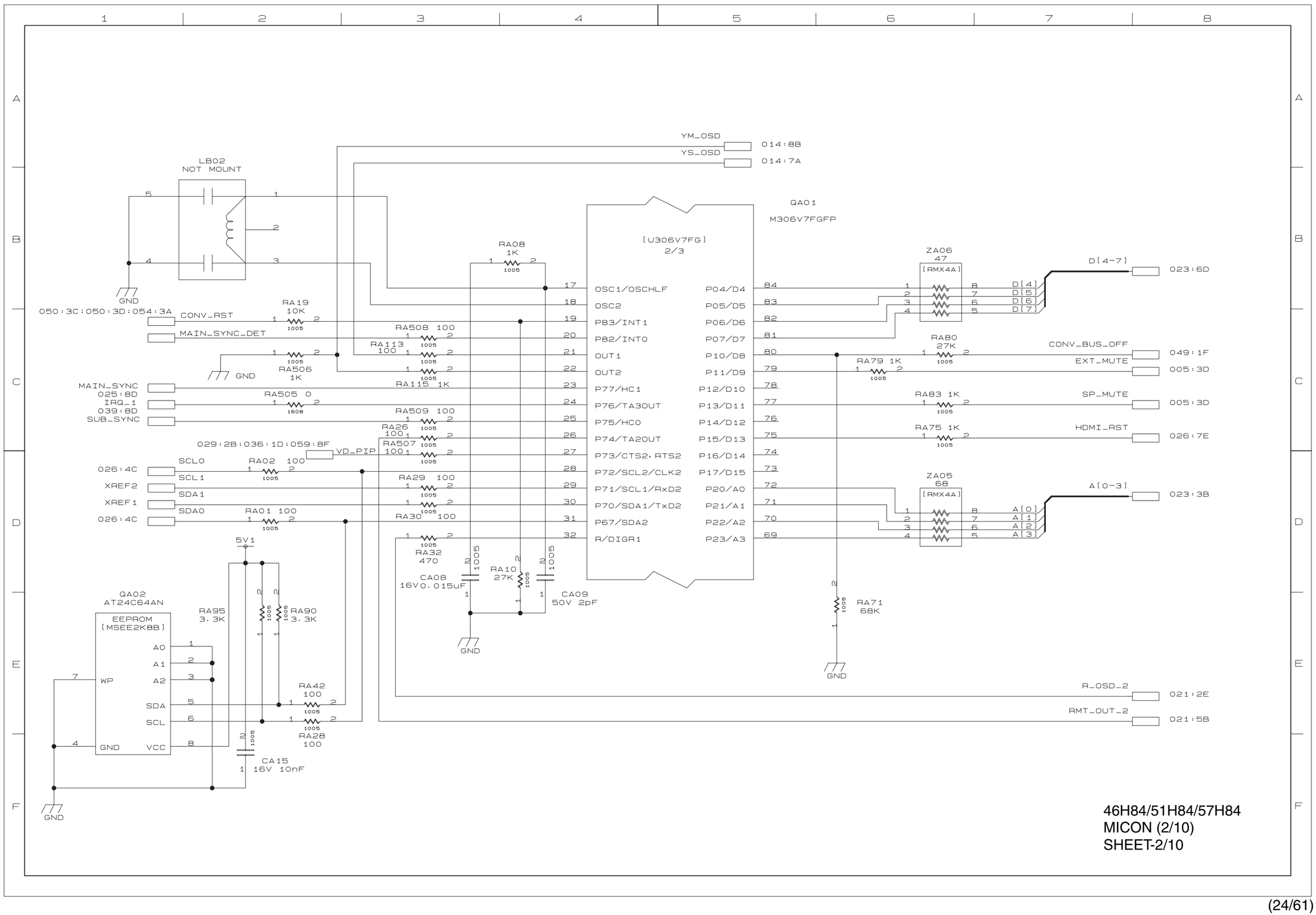



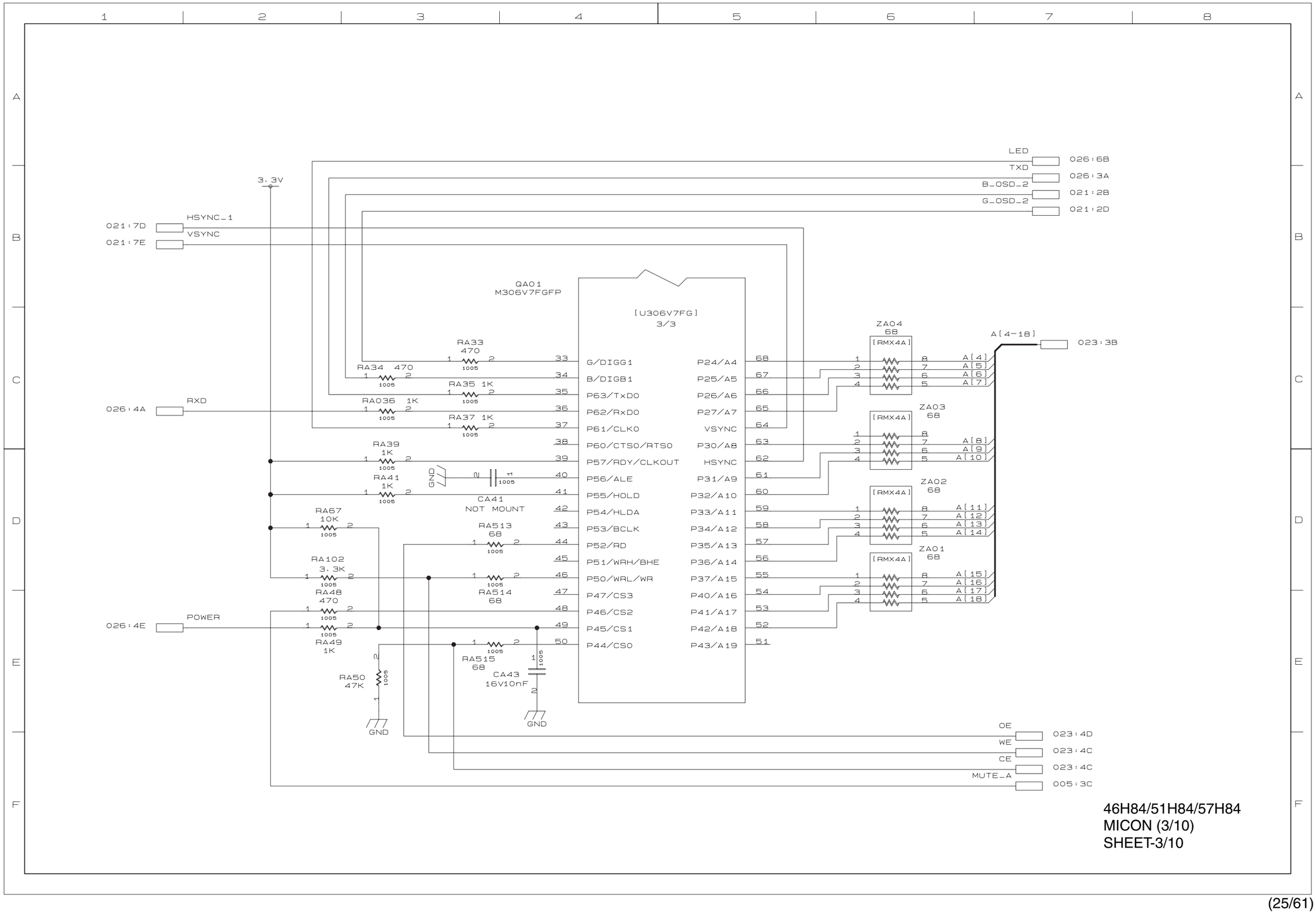

46H84/51H84/57H84
AV (10/10)
SHEET-10/10

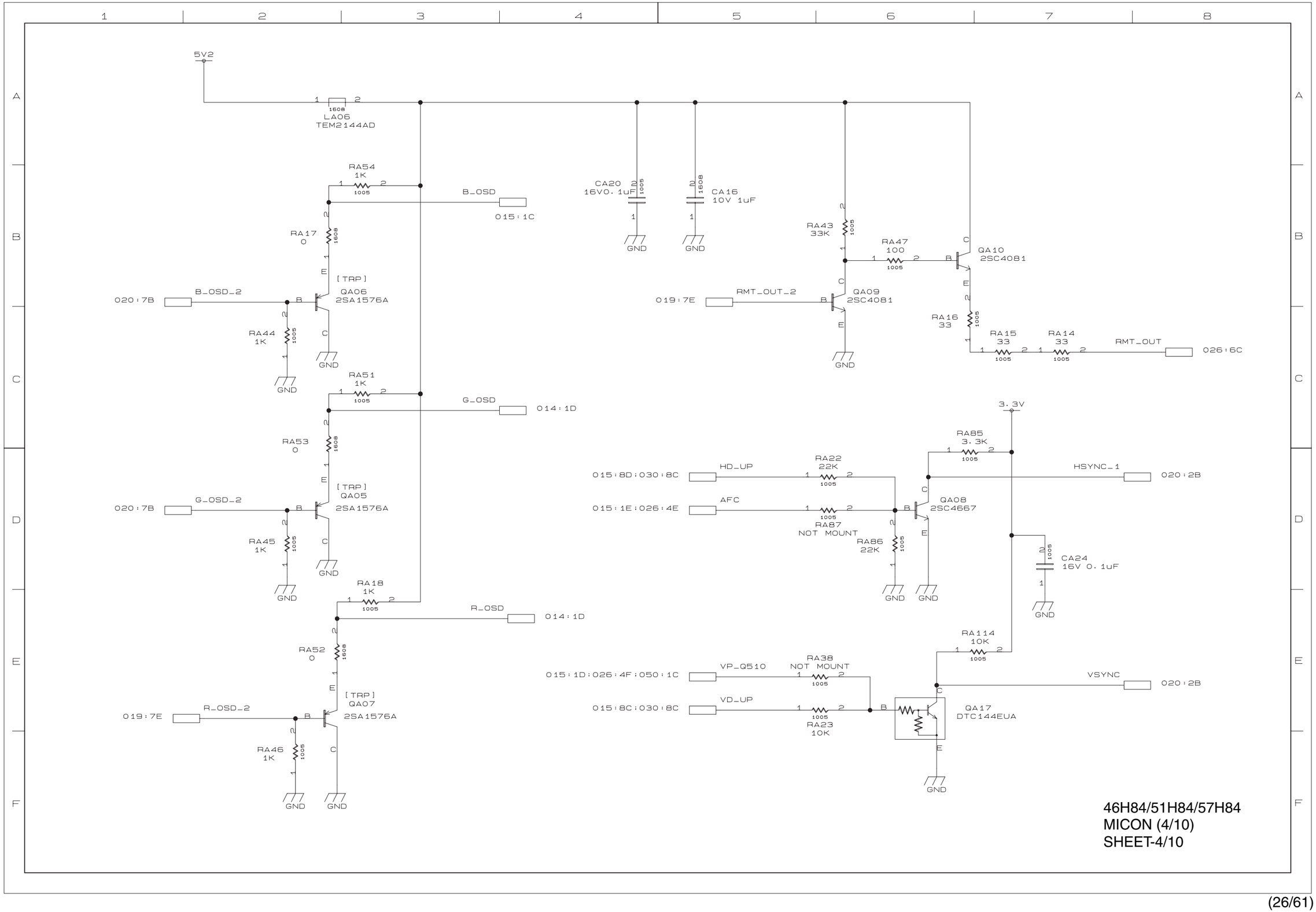


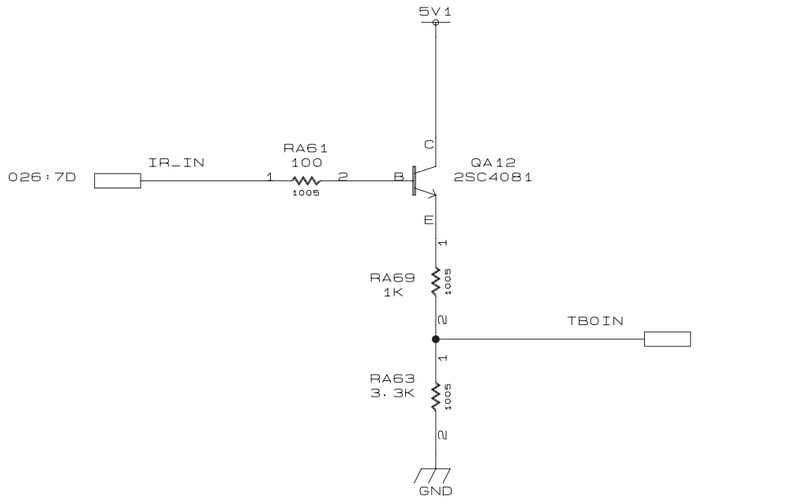

46H84/51H84/57H84
MICON (1/10)
SHEET-1/10

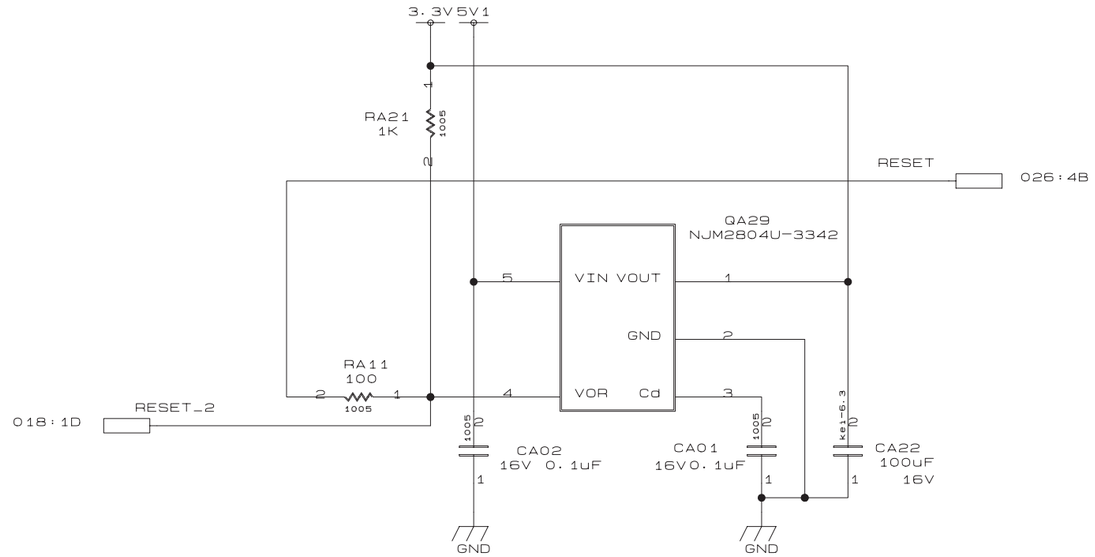


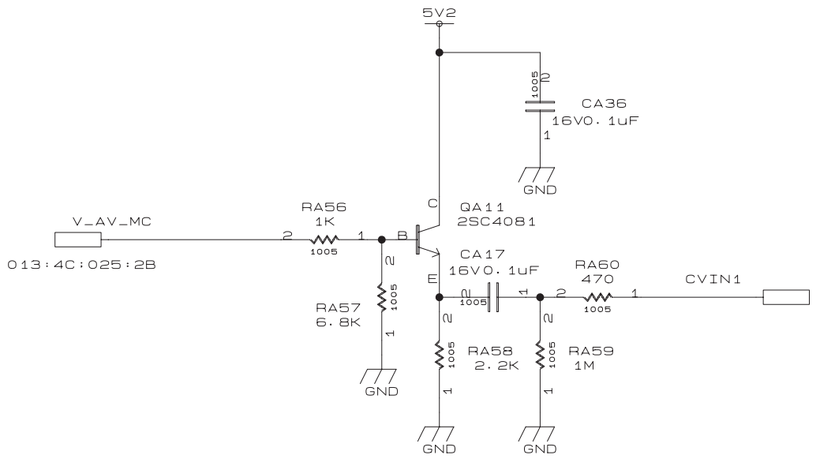

46H84/51H84/57H84
MICON (2/10)
SHEET-2/10

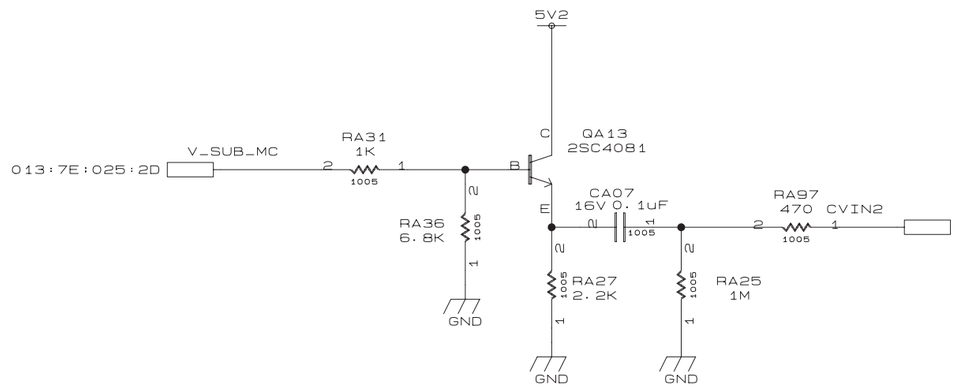

LED
026:6B
TXD
026:3A
B_OSD_2
021:2B
G_OSD_2
021:2D
3.3V
021:7D
HSYNC_1
021:7E
VSYNC
QA01
M306V7FGFP
[U306V7FG]
3/3
RA33
470
RA34 470
RA35 1K
RA036 1K
RA37 1K
RA39
1K
RA41
1K
CA41
NOT MOUNT
RA67
10K
RA513
68
RA102
3.3K
RA514
68
RA48
470
RA49
1K
RA515
68
CA43
16V10nF
RA50
47K
026:4A
RXD
026:4E
POWER
G/DIGG1
B/DIGB1
P63/TxD0
P62/RxD0
P61/CLK0
P60/CTS0/RTS0
P57/RDY/CLKOUT
P56/ALE
P55/HOLD
P54/HLDA
P53/BCLK
P52/RD
P51/WRH/BHE
P50/WRL/WR
P47/CS3
P46/CS2
P45/CS1
P44/CS0
P24/A4
P25/A5
P26/A6
P27/A7
VSYNC
P30/A8
HSYNC
P31/A9
P32/A10
P33/A11
P34/A12
P35/A13
P36/A14
P37/A15
P40/A16
P41/A17
P42/A18
P43/A19
ZA04
68
[RMX4A]
ZA03
68
ZA02
68
ZA01
68
A[4-18]
023:3B
A[4]
A[5]
A[6]
A[7]
A[8]
A[9]
A[10]
A[11]
A[12]
A[13]
A[14]
A[15]
A[16]
A[17]
A[18]
OE
023:4D
WE
023:4C
CE
023:4C
MUTE_A
005:3C
GND
46H84/51H84/57H84
MICON (3/10)
SHEET-3/10


5V2
LA06
TEM2144AD
RA54
1K
B_OSD
015:1C
RA17
0
[TRP]
QA06
2SA1576A
020:7B
B_OSD_2
RA44
1K
GND
CA20
16V0.1uF
CA16
10V 1uF
RA43
33K
RA47
100
QA10
2SC4081
019:7E
RMT_OUT_2
QA09
2SC4081
RA16
33
RA15
33
RA14
33
RMT_OUT
026:6C
RA51
1K
G_OSD
014:1D
RA53
0
[TRP]
QA05
2SA1576A
G_OSD_2
RA45
1K
RA18
1K
R_OSD
014:1D
RA52
0
[TRP]
QA07
2SA1576A
R_OSD_2
RA46
1K
3.3V
RA85
3.3K
HD_UP
015:8D:030:8C
RA22
22K
AFC
015:1E:026:4E
RA87
NOT MOUNT
QA08
2SC4667
RA86
22K
HSYNC_1
020:2B
CA24
16V 0.1uF
RA114
10K
VP_Q510
015:1D:026:4F:050:1C
RA38
NOT MOUNT
VD_UP
015:8C:030:8C
RA23
10K
QA17
DTC144EUA
VSYNC
020:2B
46H84/51H84/57H84
MICON (4/10)
SHEET-4/10

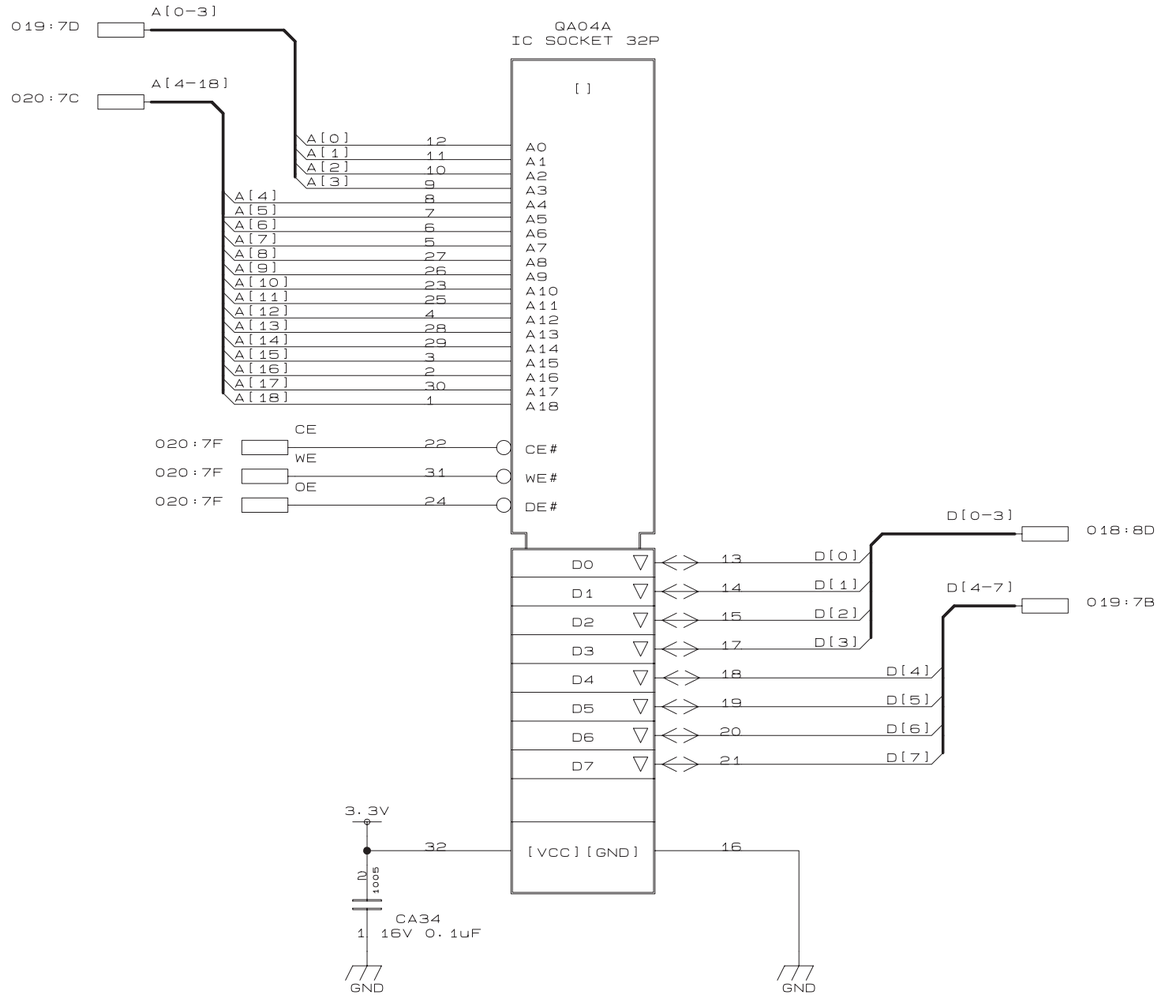


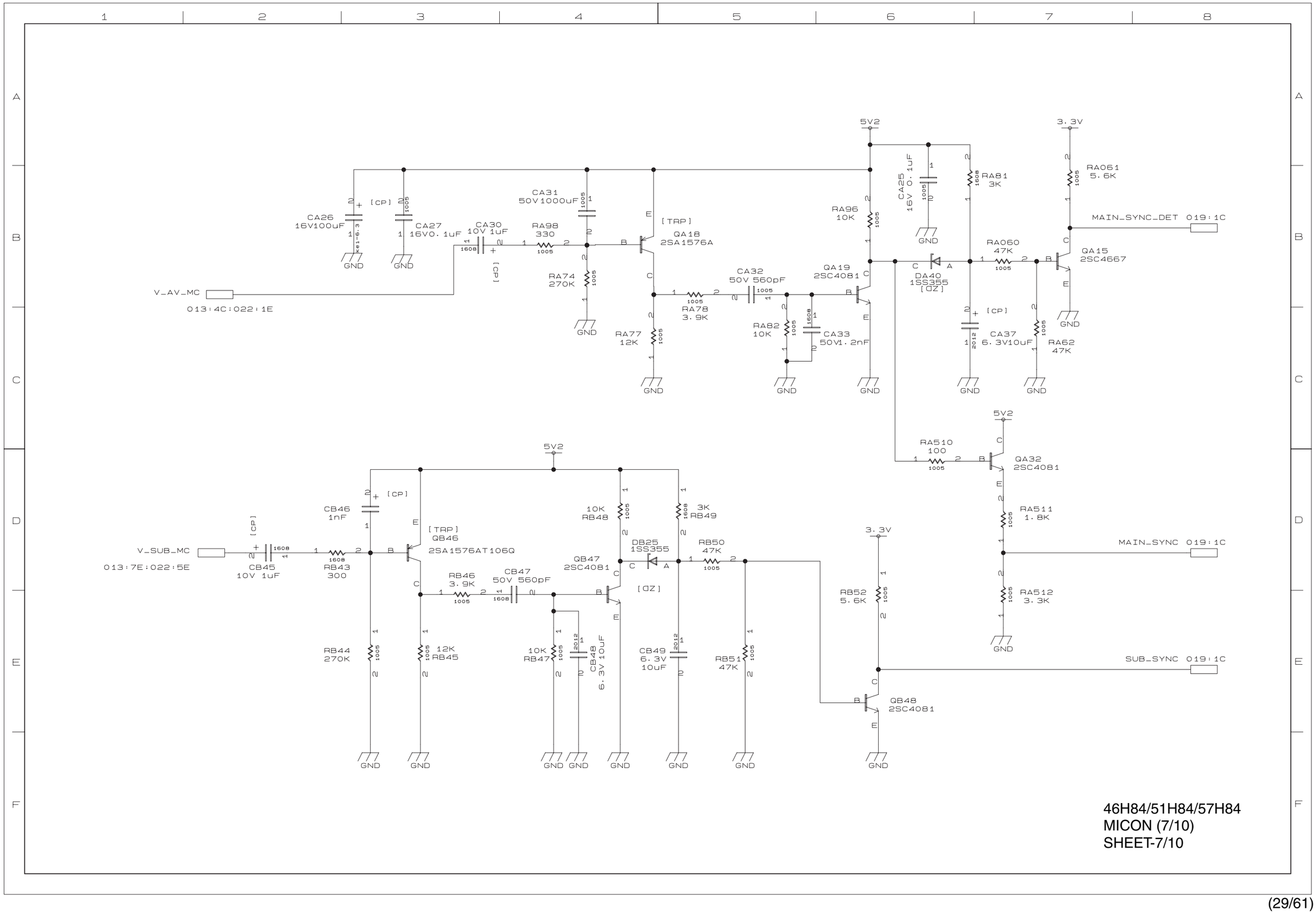



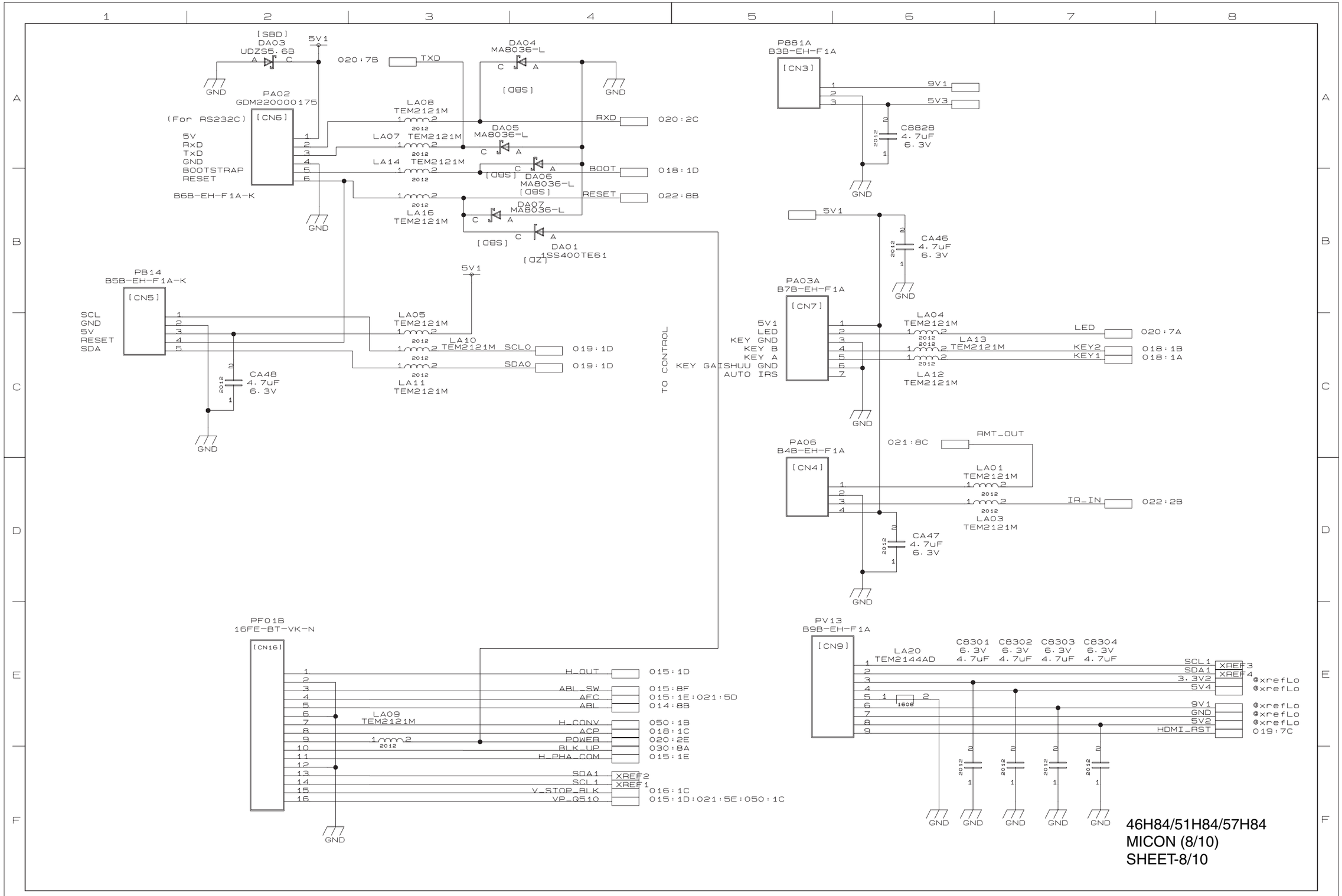

46H84/51H84/57H84
MICON (5/10)
SHEET-5/10

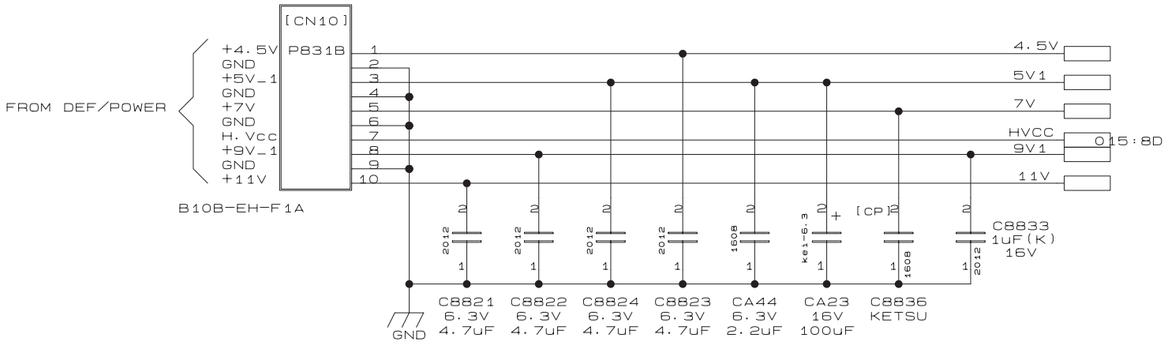


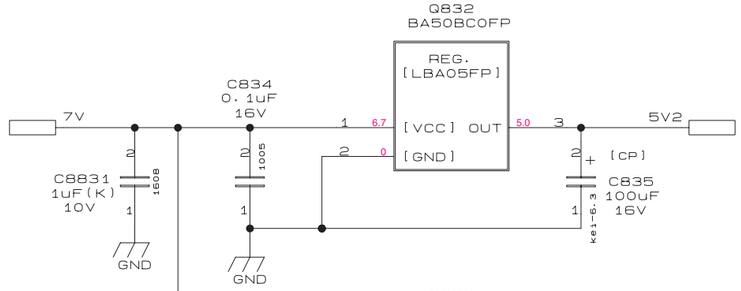

46H84/51H84/57H84
MICON (6/10)
SHEET-6/10

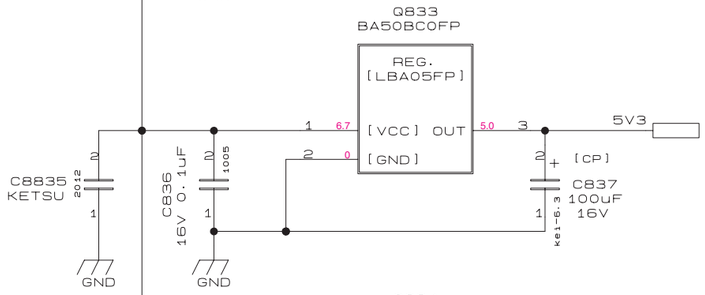


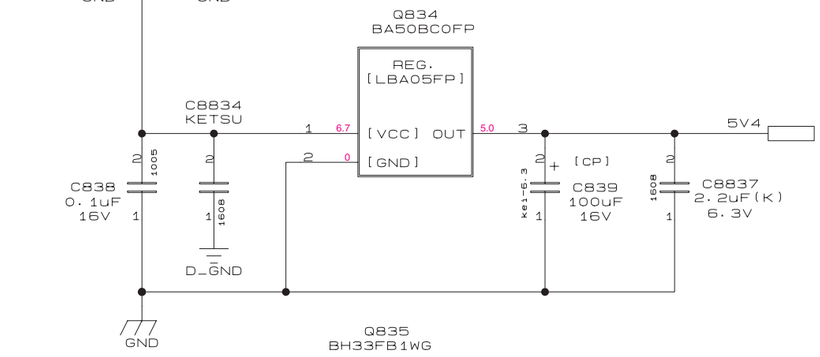

46H84/51H84/57H84
MICON (7/10)
SHEET-7/10

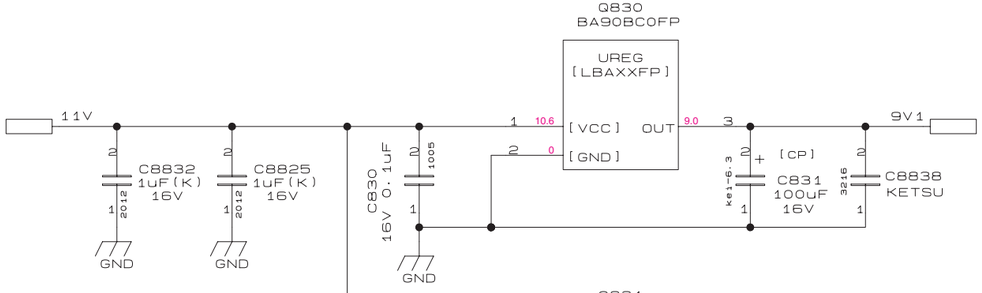

[SBD]
DA03
UDZS5.6B
5V1
GND
020:7B
TXD
DA04
MA8036-L
[DBS]
PA02
GDM2220000175
(For RS232C)
[CN6]
5V
RxD
TxD
GND
BOOTSTRAP
RESET
B6B-EH-F1A-K
LA08
TEM2121M
2012
RXD
020:2C
LA07 TEM2121M
DA05
MA8036-L
LA14 TEM2121M
BOOT
018:1D
DA06
MA8036-L
LA16
TEM2121M
RESET
022:8B
DA07
MA8036-L
DA01
1SS400TE61
[DZ]
P881A
B3B-EH-F1A
[CN3]
9V1
5V3
C8828
4.7uF
6.3V
CA46
4.7uF
6.3V
PB14
B5B-EH-F1A-K
[CN5]
SCL
GND
5V
RESET
SDA
LA05
TEM2121M
LA10
TEM2121M
SCL0
019:1D
SDA0
LA11
TEM2121M
CA48
4.7uF
6.3V
TO CONTROL
KEY GAISHUU
PA03A
B7B-EH-F1A
[CN7]
5V1
LED
KEY GND
KEY B
KEY A
GND
AUTO IRS
LA04
TEM2121M
LED
020:7A
LA13
TEM2121M
KEY2
018:1B
KEY1
018:1A
LA12
TEM2121M
PA06
B4B-EH-F1A
[CN4]
021:8C
RMT_OUT
LA01
TEM2121M
IR_IN
022:2B
LA03
TEM2121M
CA47
4.7uF
6.3V
PF01B
16FE-BT-VK-N
[CN16]
H_OUT
015:1D
ABL_SW
015:8F
AFC
015:1E:021:5D
ABL
014:8B
LA09
TEM2121M
H_CONV
050:1B
ACP
018:1C
POWER
020:2E
BLK_UP
030:8A
H_PHA_COM
015:1E
SDA1
SCL1
V_STOP_BLK
016:1C
VP_Q510
015:1D:021:5E:050:1C
XREF1
XREF2
PV13
B9B-EH-F1A
[CN9]
LA20
TEM2144AD
C8301
C8302
C8303
C8304
6.3V
4.7uF
SCL1
SDA1
3.3V2
5V4
9V1
GND
5V2
HDMI_RST
019:7C
@xrefLo
XREF3
XREF4
1608
46H84/51H84/57H84
MICON (8/10)
SHEET-8/10

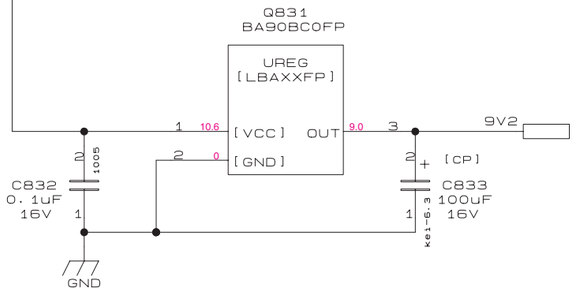


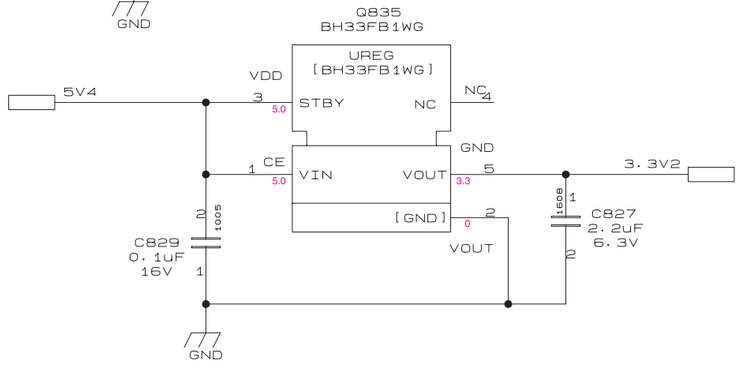



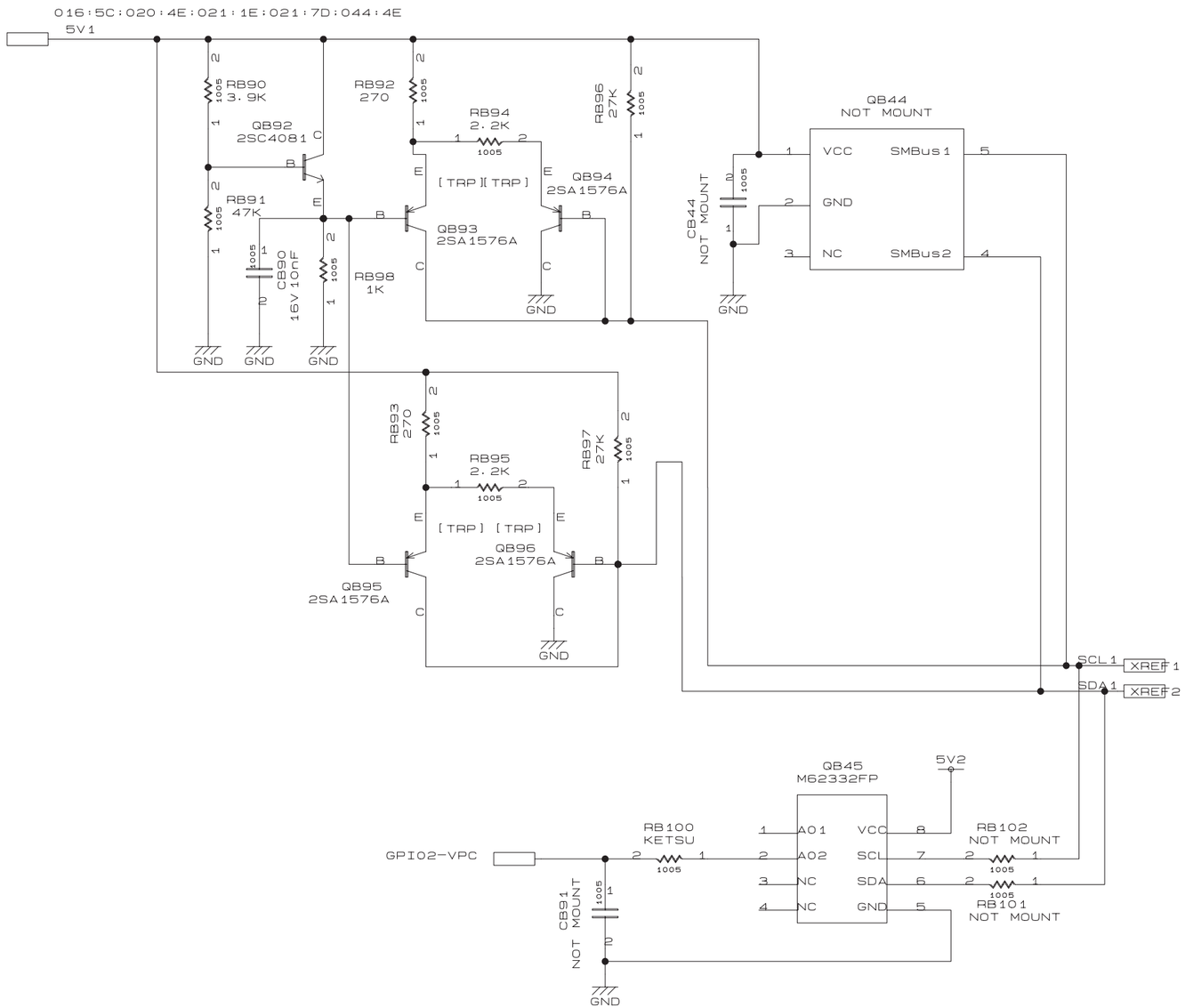



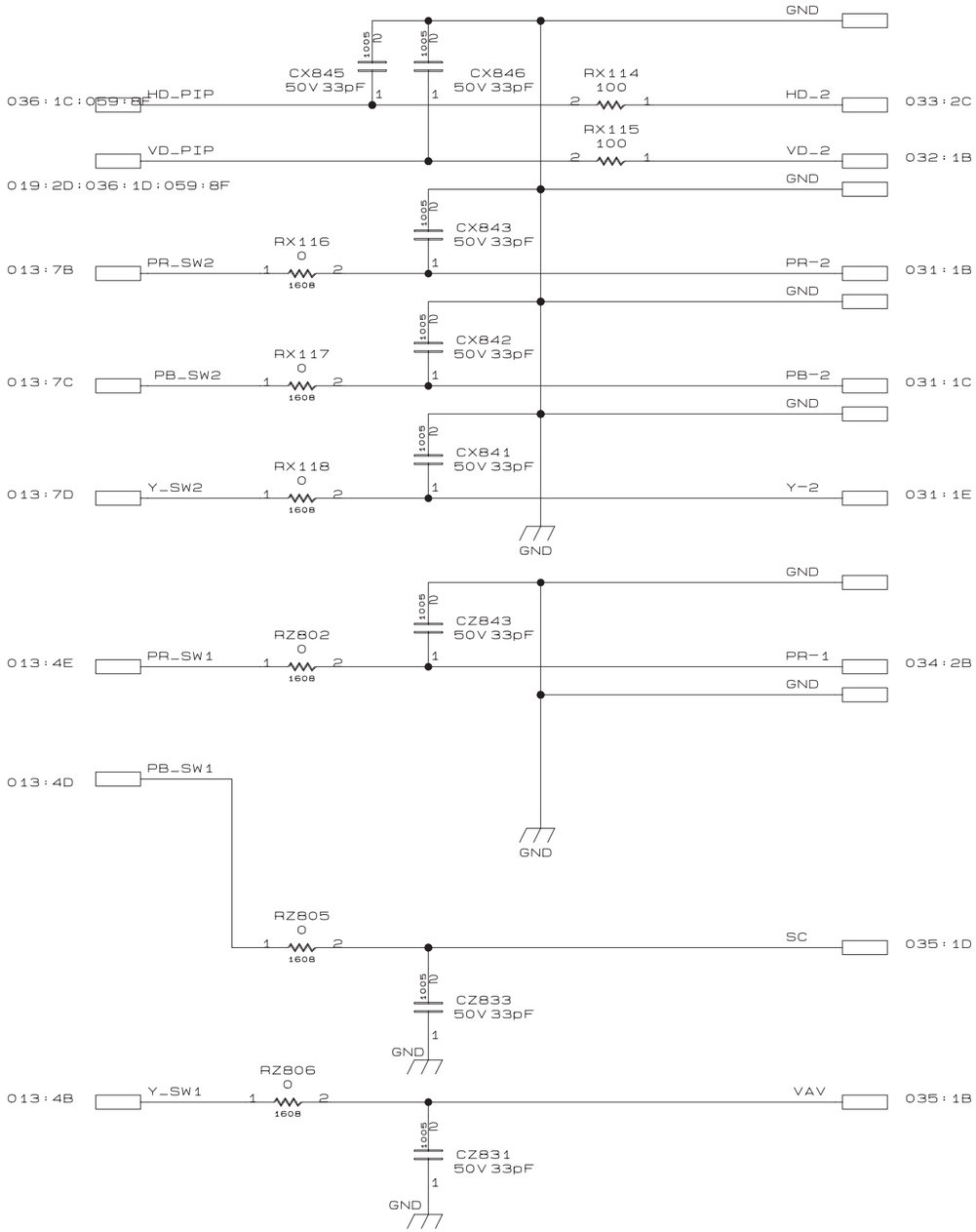



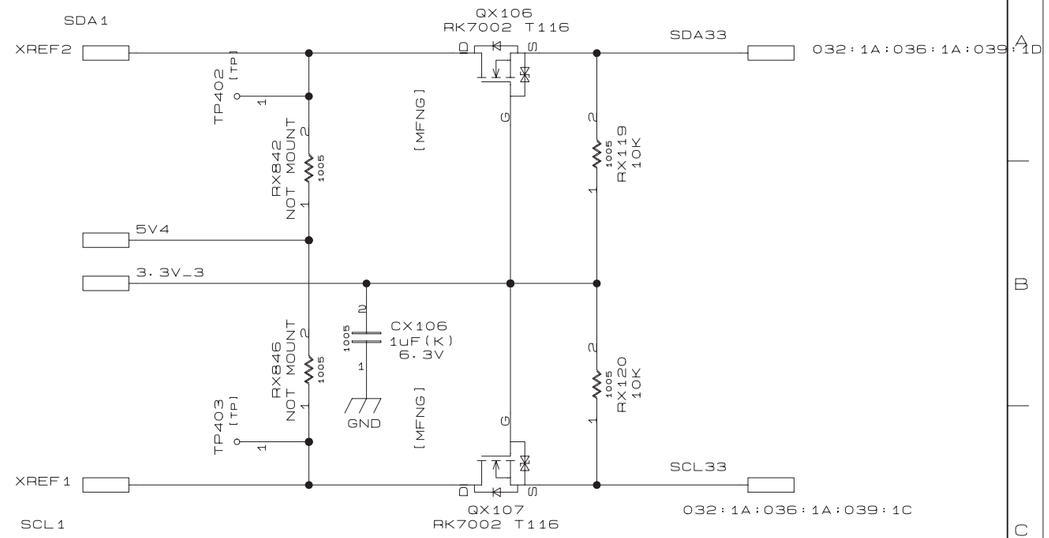



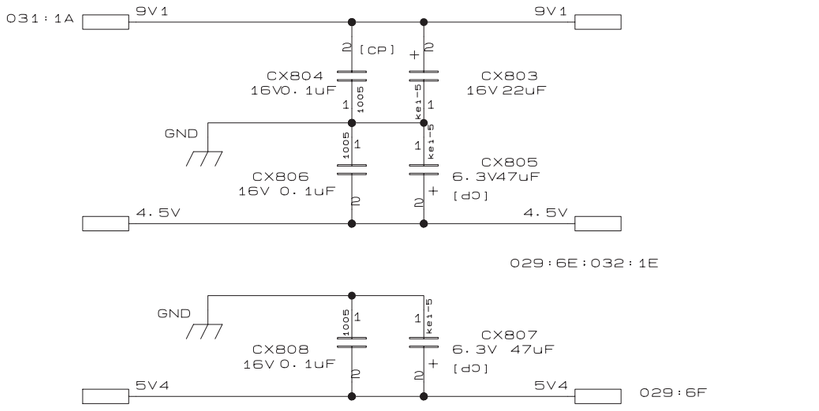

46H84/51H84/57H84
MICON (9/10)
SHEET-9/10



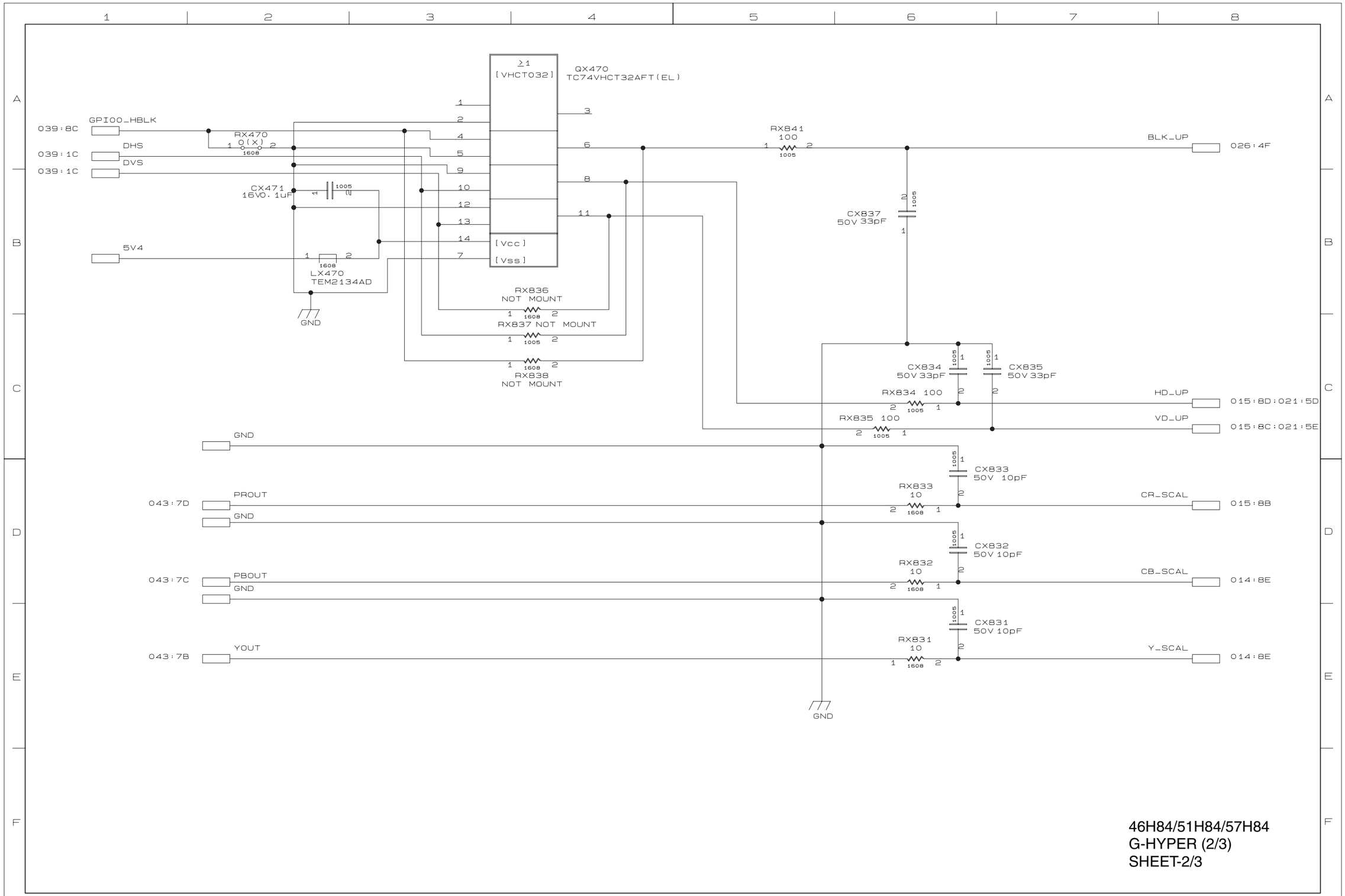

46H84/51H84/57H84
MICON (10/10)
SHEET-10/10

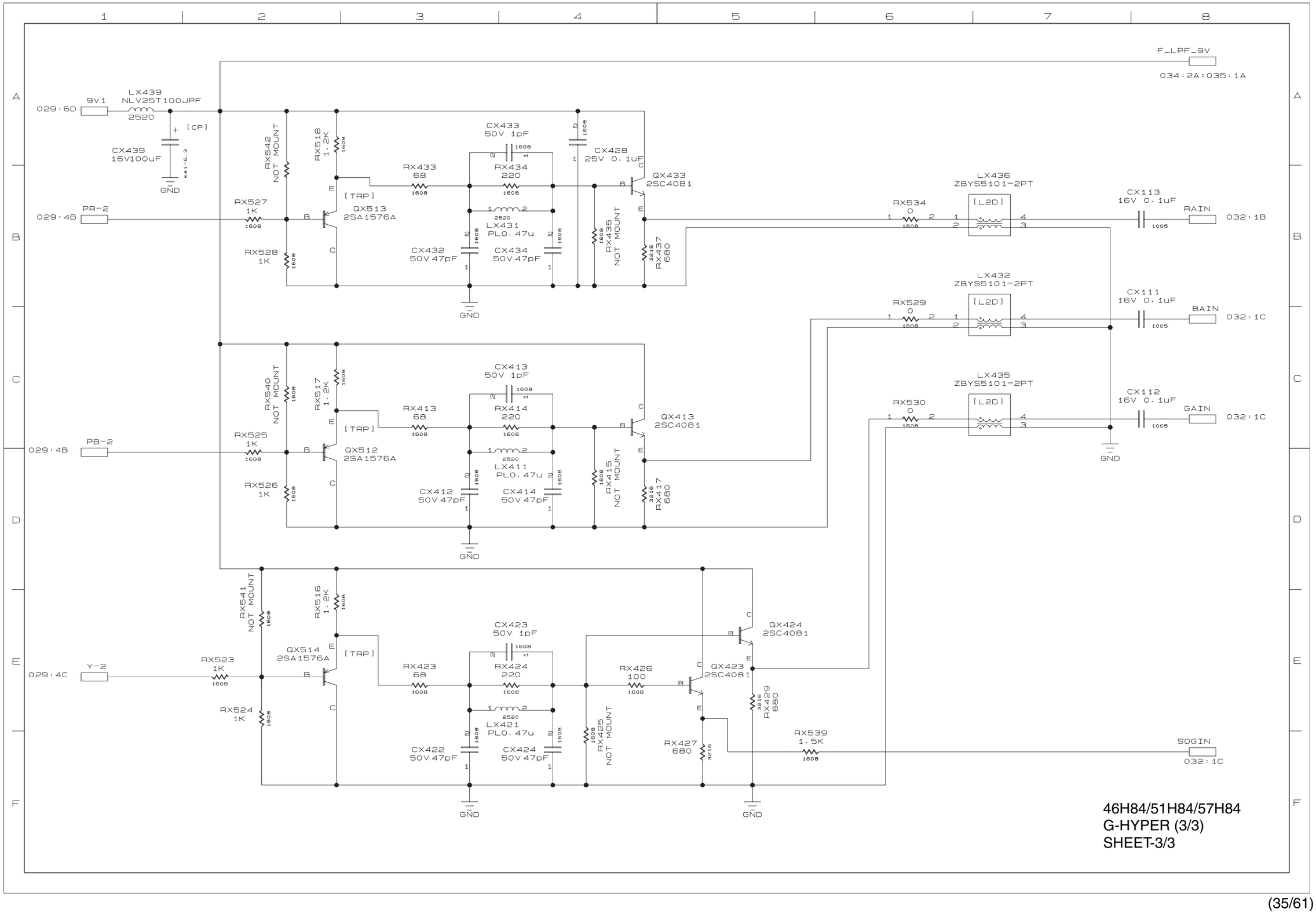


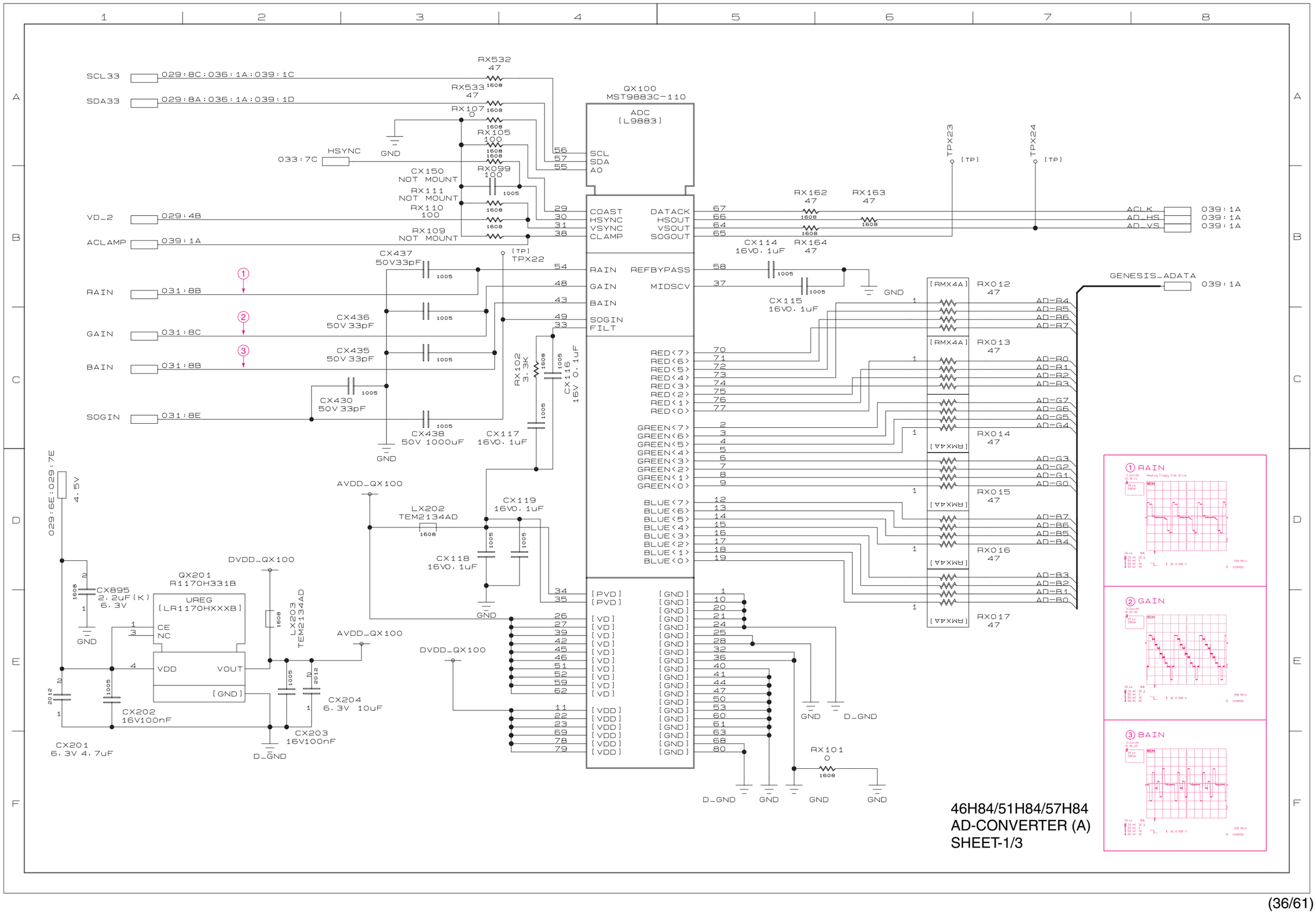



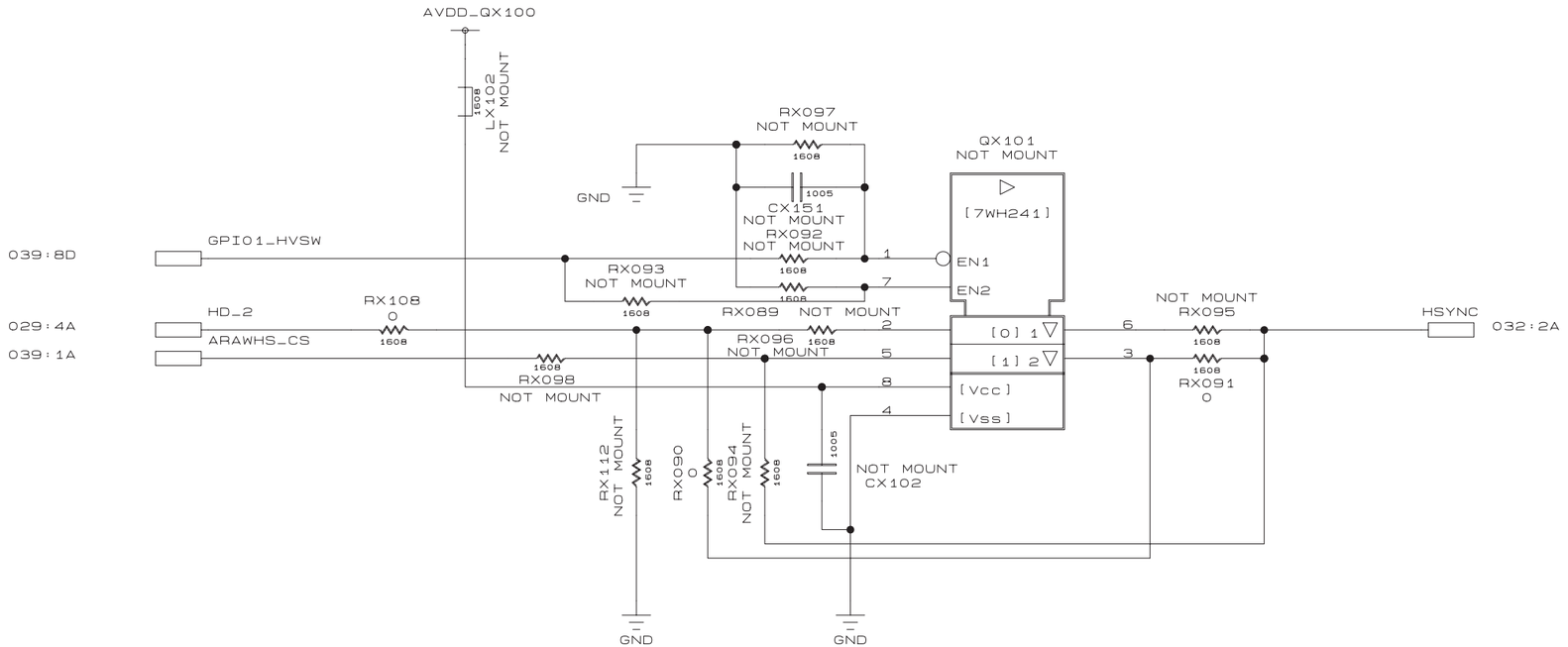




46H84/51H84/57H84
G-HYPER (1/3)
SHEET-1/3

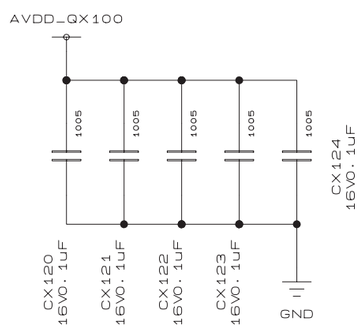

QX470
TC74VHCT32AFT(EL)
[VHCT032]
[Vcc]
[Vss]
GPIO0_HBLK
039:8C
DHS
039:1C
DVS
039:1C
5V4
RX470
CX471
16V0.1UF
LX470
TEM2134AD
GND
RX836
NOT MOUNT
RX837 NOT MOUNT
RX838
NOT MOUNT
RX841
100
BLK_UP
026:4F
CX837
50V 33pF
CX834
50V 33pF
CX835
50V 33pF
RX834 100
HD_UP
015:8D:021:5D
RX835 100
VD_UP
015:8C:021:5E
GND
CX833
50V 10pF
RX833
10
CR_SCAL
015:8B
043:7D
PROUT
GND
CX832
50V 10pF
RX832
10
CB_SCAL
014:8E
043:7C
PBOUT
GND
CX831
50V 10pF
RX831
10
Y_SCAL
014:8E
043:7B
YOUT
GND
46H84/51H84/57H84
G-HYPER (2/3)
SHEET-2/3


F_LPF_9V
034:2A:035:1A
9V1
LX439
NLV25T100JPF
2520
029:6D
[CP]
CX439
16V100uF
GND
RX542
NOT MOUNT
RX518
1.2K
CX433
50V 1pF
RX434
220
CX428
25V 0.1uF
RX433
68
[TRP]
QX433
2SC4081
PR-2
029:4B
RX527
1K
QX513
2SA1576A
RX528
1K
CX432
50V 47pF
CX434
50V 47pF
LX431
PLO.47u
RX435
NOT MOUNT
RX437
680
LX436
ZBYS5101-2PT
[L2D]
RX534
0
CX113
16V 0.1uF
RAIN
032:1B
LX432
ZBYS5101-2PT
RX529
0
CX111
16V 0.1uF
BAIN
032:1C
LX435
ZBYS5101-2PT
RX530
0
CX112
16V 0.1uF
GAIN
032:1C
RX540
NOT MOUNT
RX517
1.2K
CX413
50V 1pF
RX414
220
RX413
68
[TRP]
QX413
2SC4081
PB-2
029:4B
RX525
1K
QX512
2SA1576A
RX526
1K
CX412
50V 47pF
CX414
50V 47pF
LX411
PLO.47u
RX415
NOT MOUNT
RX417
680
RX541
NOT MOUNT
RX516
1.2K
CX423
50V 1pF
RX424
220
RX423
68
[TRP]
QX424
2SC4081
QX514
2SA1576A
Y-2
029:4C
RX523
1K
RX524
1K
CX422
50V 47pF
CX424
50V 47pF
LX421
PLO.47u
RX425
NOT MOUNT
RX426
100
QX423
2SC4081
RX429
680
RX427
680
RX539
1.5K
SOGIN
032:1C
46H84/51H84/57H84
G-HYPER (3/3)
SHEET-3/3

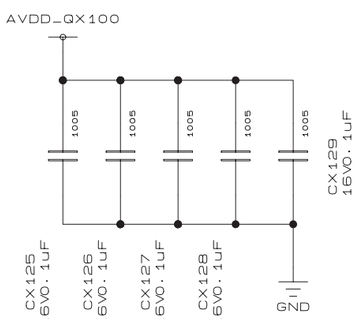

SCL33
029:8C:036:1A:039:1C
SDA33
029:8A:036:1A:039:1D
HSYNC
033:7C
GND
RX532 47
RX533 47
RX107 0
RX105 100
RX099 100
CX150 NOT MOUNT
RX111 NOT MOUNT
RX110 100
RX109 NOT MOUNT
VD_2
029:4B
ACLAMP
039:1A
QX100
MST9883C-110
ADC
[L9883]
SCL
SDA
AO
COAST
HSYNC
VSYNC
CLAMP
DATACK
HSOUT
VSOUT
SOGOUT
RX162 47
RX163 47
TPX23
TPX24
[TP]
ACLK
AD_HS
AD_VS
039:1A
CX114 16V0.1uF
RX164 47
CX115 16V0.1uF
GENESIS_ADATA
039:1A
CX437 50V33pF
TPX22
RAIN
031:8B
GAIN
031:8C
BAIN
031:8B
SOGIN
031:8E
CX436 50V33pF
CX435 50V33pF
CX430 50V33pF
CX438 50V 1000uF
CX117 16V0.1uF
RX102 3.3K
CX116 16V 0.1uF
REFBYPASS
MIDSCV
RAIN
GAIN
BAIN
SOGIN
FILT
RED<7>
RED<6>
RED<5>
RED<4>
RED<3>
RED<2>
RED<1>
RED<0>
GREEN<7>
GREEN<6>
GREEN<5>
GREEN<4>
GREEN<3>
GREEN<2>
GREEN<1>
GREEN<0>
BLUE<7>
BLUE<6>
BLUE<5>
BLUE<4>
BLUE<3>
BLUE<2>
BLUE<1>
BLUE<0>
[RMX4A]
RX012 47
RX013 47
RX014 47
RX015 47
RX016 47
RX017 47
AD-R4
AD-R5
AD-R6
AD-R7
AD-R0
AD-R1
AD-R2
AD-R3
AD-G7
AD-G6
AD-G5
AD-G4
AD-G3
AD-G2
AD-G1
AD-G0
AD-B7
AD-B6
AD-B5
AD-B4
AD-B3
AD-B2
AD-B1
AD-B0
AVDD_QX100
LX202 TEM2134AD
CX119 16V0.1uF
CX118 16V0.1uF
DVDD_QX100
[PVD]
[VD]
[VDD]
[GND]
D_GND
029:6E:029:7E
4.5V
CX895 2.2uF(K) 6.3V
QX201 R1170H331B
UREG
[LR1170HXXXB]
CE
NC
VDD
VOUT
CX202 16V100nF
CX201 6.3V 4.7uF
LX203 TEM2134AD
CX204 6.3V 10uF
CX203 16V100nF
RX101 0
① RAIN
② GAIN
③ BAIN
46H84/51H84/57H84
AD-CONVERTER (A)
SHEET-1/3



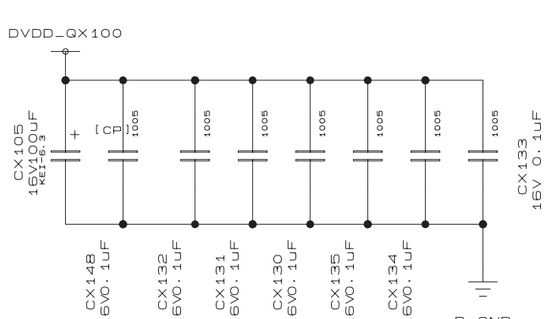

Capasitor for QX100



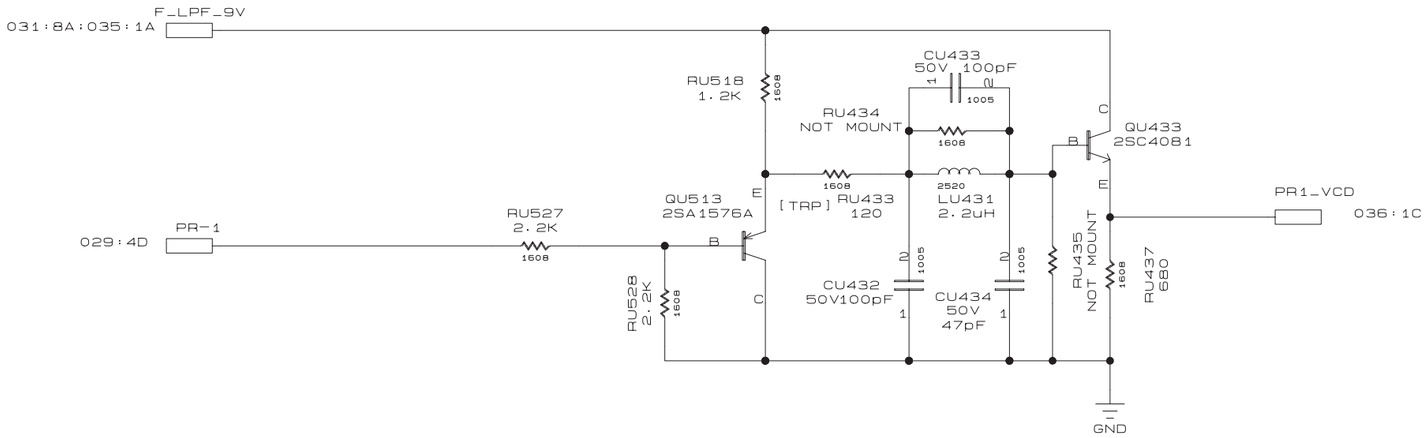

Capasitor for QX100



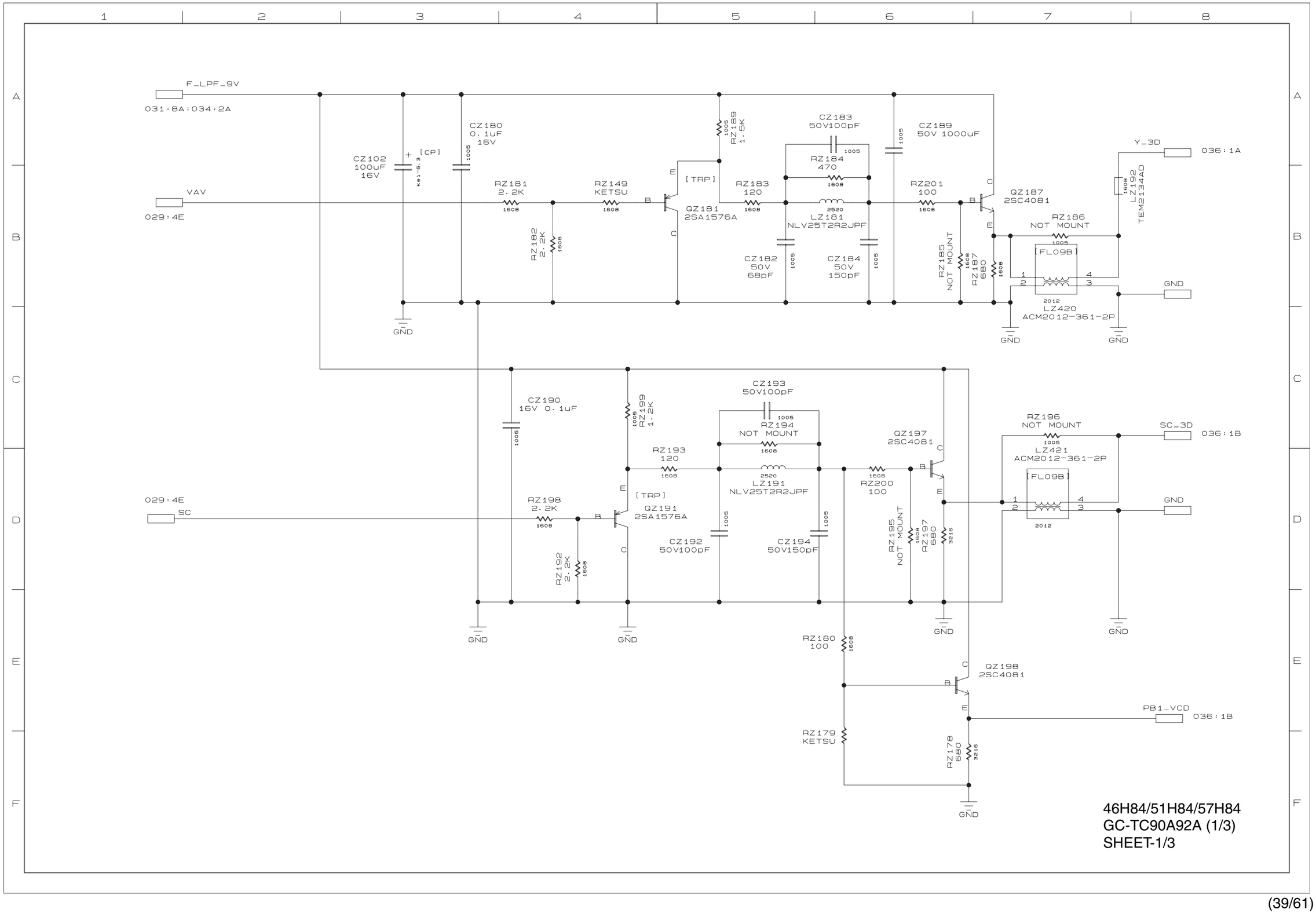

Capasitor for QX100

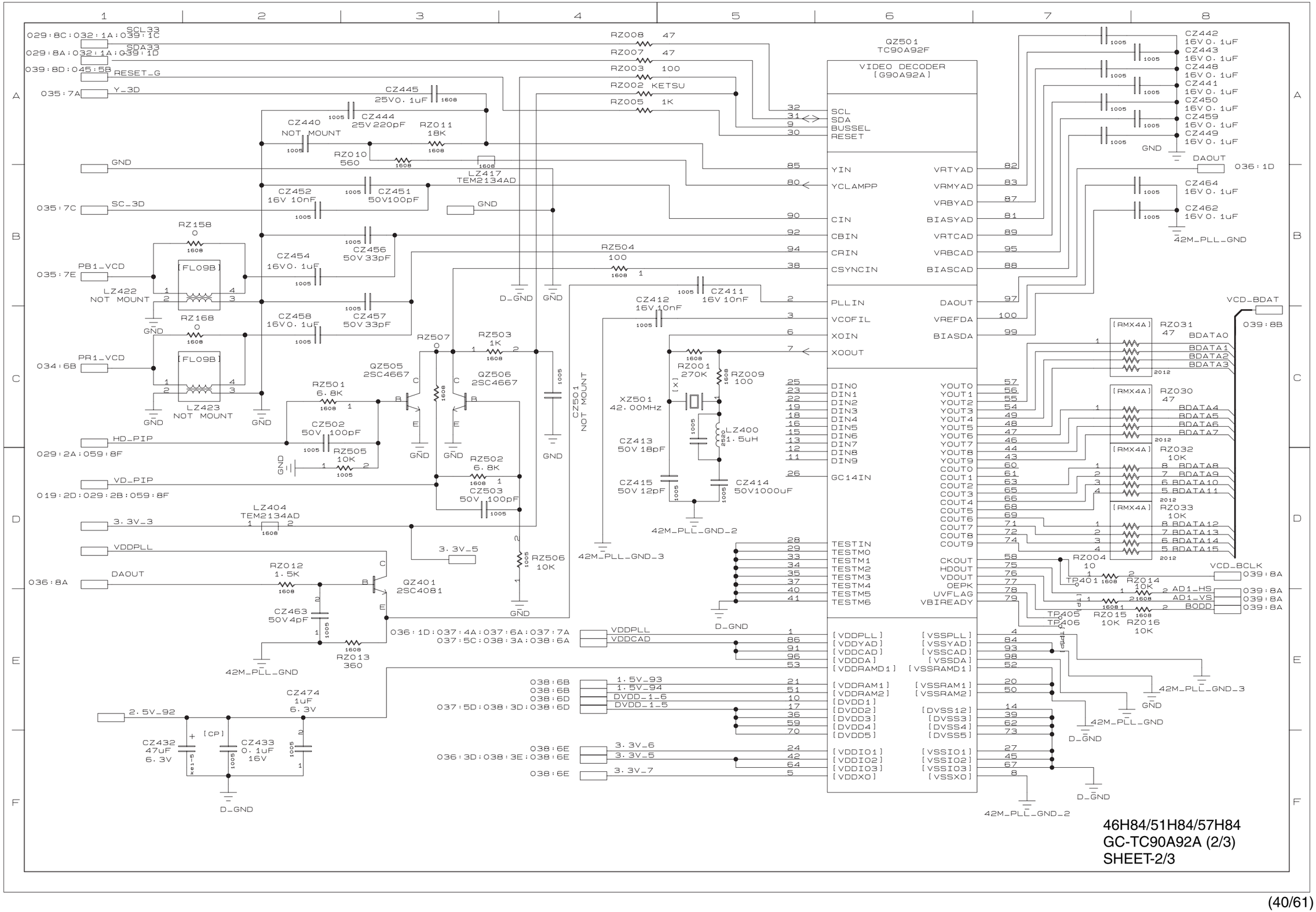



46H84/51H84/57H84
AD-CONVERTER (B)
SHEET-2/3

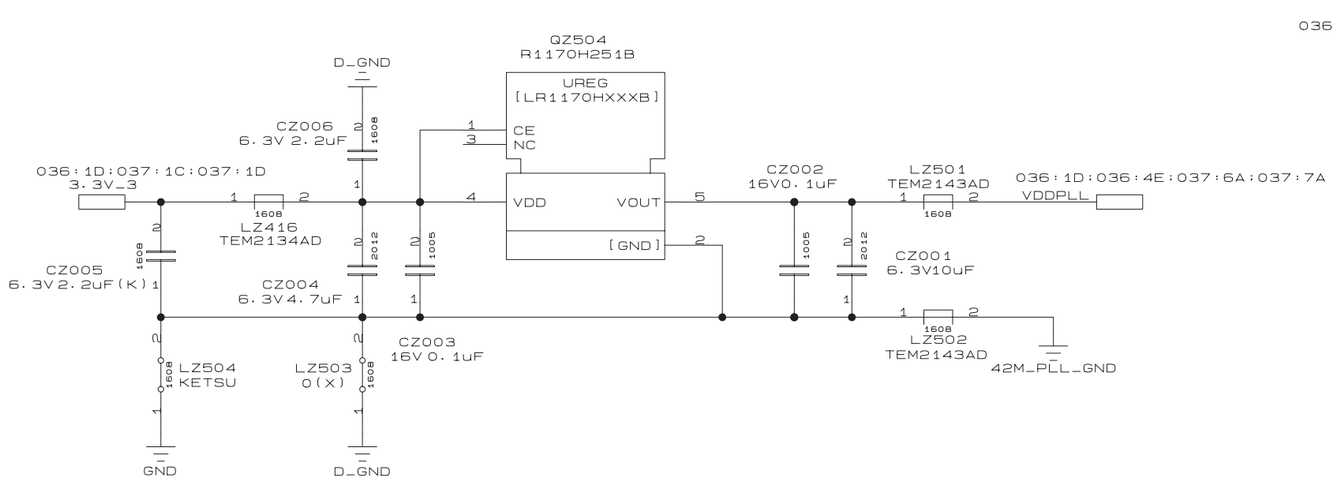


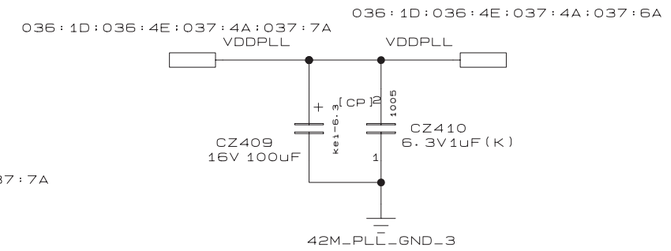

46H84/51H84/57H84
AD-CONVERTER (C)
SHEET-3/3

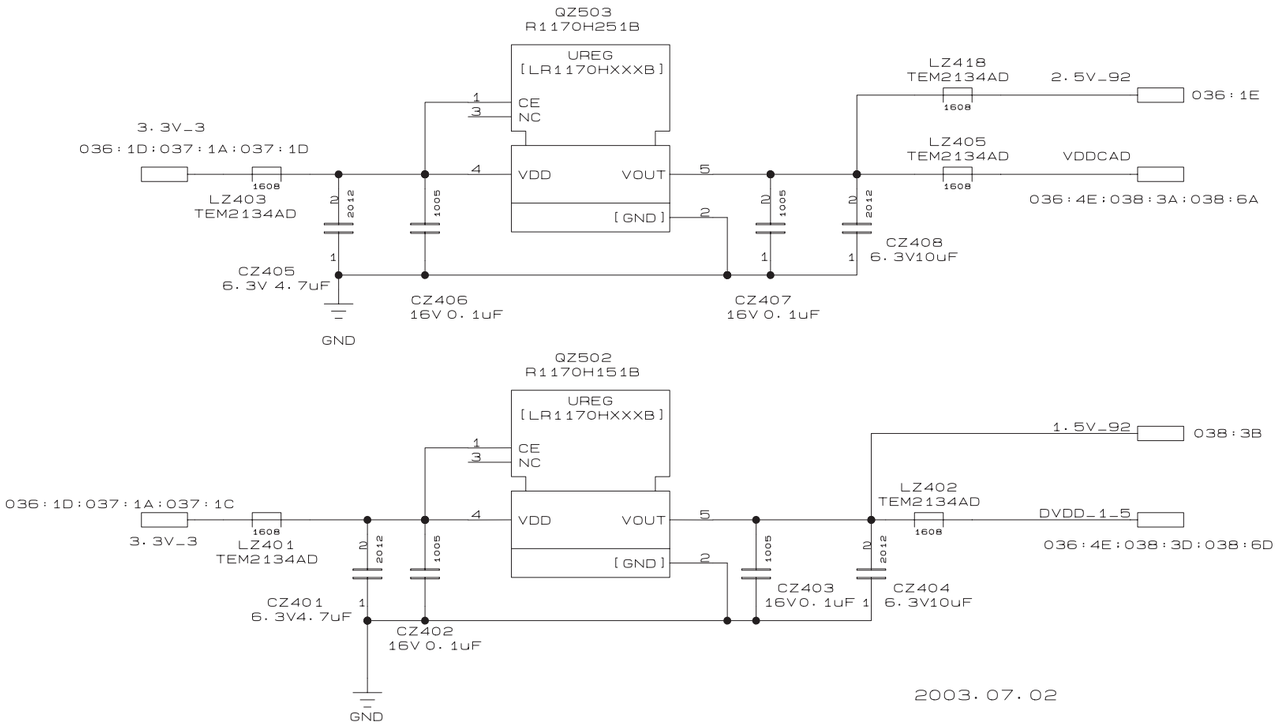

F_LPF_9V
031:8A:034:2A
VAV
029:4E
CZ102
100uF
16V
[CP]
CZ180
0.1uF
16V
RZ181
2.2K
RZ182
2.2K
RZ149
KETSU
[TRP]
QZ181
2SA1576A
RZ189
1.5K
CZ183
50V100pF
RZ184
470
RZ183
120
LZ181
NLV25T2R2JPF
CZ182
50V
68pF
CZ184
50V
150pF
CZ189
50V 1000uF
RZ201
100
QZ187
2SC4081
RZ186
NOT MOUNT
[FL09B]
LZ420
ACM2012-361-2P
RZ185
NOT MOUNT
RZ187
680
Y_3D
036:1A
LZ192
TEM2134AD
GND
CZ190
16V 0.1uF
RZ199
1.2K
CZ193
50V100pF
RZ194
NOT MOUNT
RZ193
120
LZ191
NLV25T2R2JPF
RZ198
2.2K
QZ191
2SA1576A
RZ192
2.2K
CZ192
50V100pF
CZ194
50V150pF
RZ200
100
QZ197
2SC4081
RZ195
NOT MOUNT
RZ197
680
RZ196
NOT MOUNT
LZ421
ACM2012-361-2P
SC_3D
036:1B
RZ180
100
QZ198
2SC4081
PB1_VCD
036:1B
RZ179
KETSU
RZ178
680
46H84/51H84/57H84
GC-TC90A92A (1/3)
SHEET-1/3

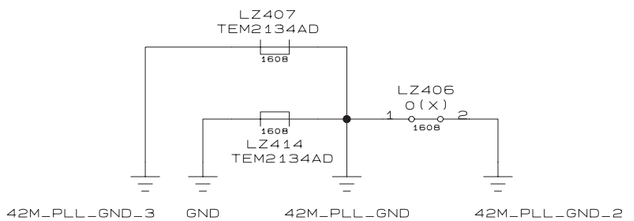


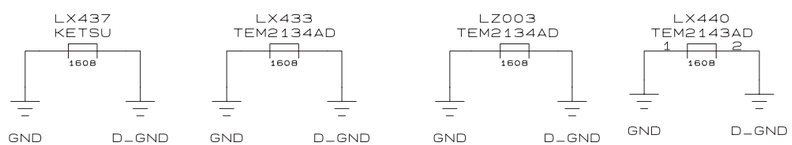

46H84/51H84/57H84
GC-TC90A92A (2/3)
SHEET-2/3



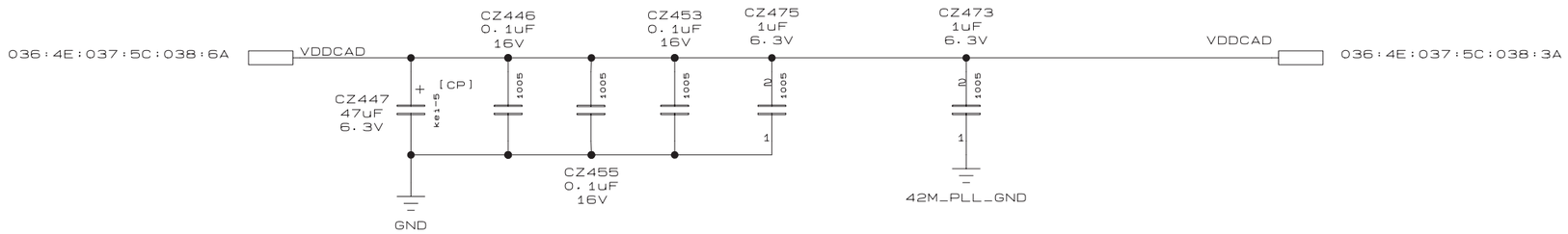



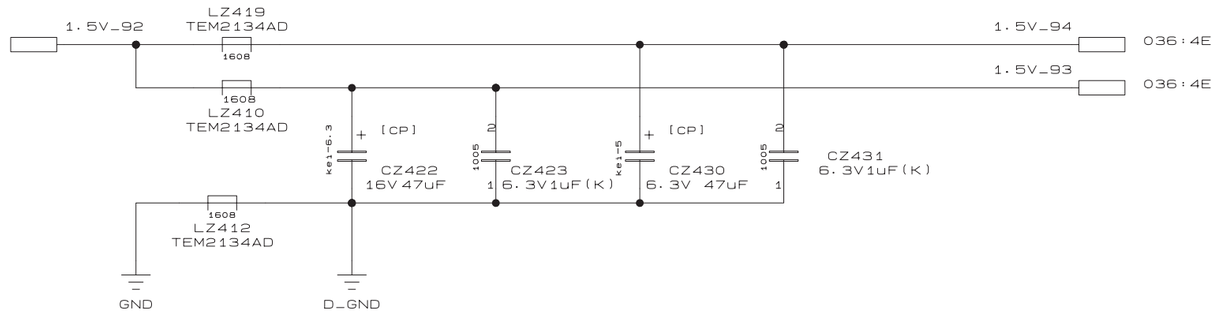



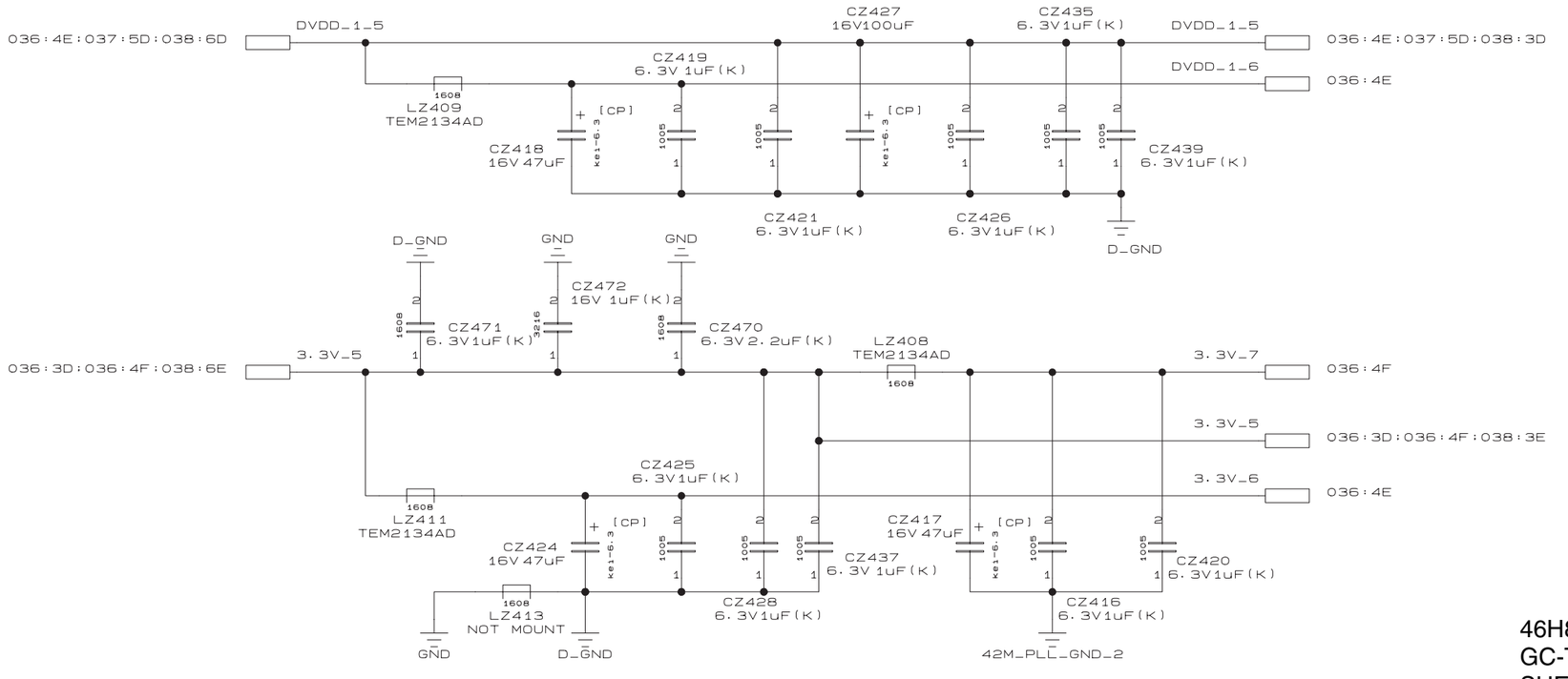




2003.07.02

46H84/51H84/57H84
GC-REG




46H84/51H84/57H84
GC-TC90A92A (3/3)
SHEET-3/3

GM6010 QX300

[G6010]

[INPUT]

| | | | |
|---|---|---|---|
| ACLK1 | 154 | BCLK1 | 7 |
| AODD | 155 | BODD | 8 |
| AVS | 156 | BVS | 9 |
| AHS_CS | 157 | BHS_CS | 10 |
| ASOY_G+ | 207 | BSOY_G+ | 204 |
| ASOY_G- | 206 | BSOY_G- | 205 |
| ARAWHS_CS | 158 | BRAWHS_CS | 13 |
| ACREF | 159 | BCREF | 14 |
| AHREF_DE | 160 | BHREF_DE | 15 |
| ADATA23 | 163 | BDATA23 | 16 |
| ADATA22 | 164 | BDATA22 | 18 |
| ADATA21 | 165 | BDATA21 | 19 |
| ADATA20 | 168 | BDATA20 | 20 |
| ADATA19 | 169 | BDATA19 | 22 |
| ADATA18 | 170 | BDATA18 | 23 |
| ADATA17 | 171 | BDATA17 | 24 |
| ADATA16 | 172 | BDATA16 | 25 |
| ADATA15 | 173 | BDATA15 | 28 |
| ADATA14 | 174 | BDATA14 | 29 |
| ADATA13 | 175 | BDATA13 | 30 |
| ADATA12 | 176 | BDATA12 | 31 |
| ADATA11 | 177 | BDATA11 | 32 |
| ADATA10 | 178 | BDATA10 | 34 |
| ADATA9 | 179 | BDATA9 | 35 |
| ADATA8 | 180 | BDATA8 | 36 |
| ADATA7 | 181 | BDATA7 | 37 |
| ADATA6 | 182 | BDATA6 | 38 |
| ADATA5 | 183 | BDATA5 | 39 |
| ADATA4 | 186 | BDATA4 | 42 |
| ADATA3 | 187 | BDATA3 | 43 |
| ADATA2 | 188 | BDATA2 | 44 |
| ADATA1 | 189 | BDATA1 | 45 |
| ADATA0 | 190 | BDATA0 | 46 |

[ANALOG_DIS.]

| | | | |
|---|---|---|---|
| IOG_Y | 65 | | |
| /IOG_Y | 66 | RSET | 74 |
| IOB_Pb | 68 | | |
| /IOB_Pb | 69 | COMP | 75 |
| IOR_Pr | 71 | | |
| /IOR_Pr | 72 | VREF | 76 |

[DISP CONT.]

| | | | |
|---|---|---|---|
| DHS_CS | 49 | DODD | 53 |
| DVS | 50 | | |
| DDE_BLANK | 52 | DCLK | 54 |

[HOST INTER.]

| | | | |
|---|---|---|---|
| SCLK | 2 | /SCS | 3 |
| | | /RESET | 5 |
| SDATA | 4 | /IRQ | 6 |

[PLL/DDS]

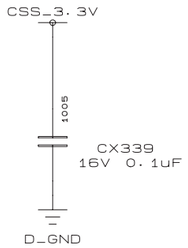
| | | | |
|---|---|---|---|
| XTAL | 201 | GPIO1 | 47 |
| TCLK | 202 | GPIO2 | 48 |
| NC | 62 | NC | 79 |
| AVDD_CSS | 208 | AVSS_CSS | 203 |
| AVDD_RPLL | 200 | AVSS_RPLL | 199 |
| AVDD_MPLL | 198 | AVSS_MPLL | 197 |
| AVDD_DDS | 194 | AVSS_DDS | 193 |
| VDD_PLL | 196 | VSS_PLL | 195 |
| VDD_DDS | 192 | VSS_DDS | 191 |
| VDD_DAC | 64 | VSS_DAC | 63 |
| AVDD_DAC | 67 | AVSS_DAC | 77 |
| AVDD_DAC | 70 | AVSS_DAC | 78 |
| AVDD_DAC | 73 | | |
| | | VSS | 1 |
| VDD(3.3V) | 21 | VSS | 11 |
| VDD(3.3V) | 51 | VSS | 17 |
| VDD(3.3V) | 162 | VSS | 26 |
| | | VSS | 33 |
| CVDD(2.5V) | 12 | VSS | 40 |
| CVDD(2.5V) | 27 | VSS | 56 |
| CVDD(2.5V) | 41 | VSS | 57 |
| CVDD(2.5V) | 55 | VSS | 59 |
| CVDD(2.5V) | 58 | VSS | 60 |
| CVDD(2.5V) | 61 | VSS | 81 |
| CVDD(2.5V) | 80 | VSS | 82 |
| CVDD(2.5V) | 83 | VSS | 84 |
| CVDD(2.5V) | 167 | VSS | 161 |
| CVDD(2.5V) | 185 | VSS | 166 |
| | | VSS | 184 |

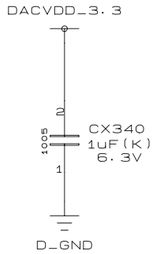
032:7B ACLK
032:1B ACLAMP
032:7B AD_VS
032:7B AD_HS
033:2C ARAWHS_CS
043:2A ACREF
032:7B GENESIS_ADATA
043:2B IOR_Y
043:2C IOR_Y-1
043:2C IOR_PB
043:2D IOR_PB-1
043:2E IOR_PR
043:2E IOR_PR-1
030:2A DHS
030:2B DVS
TPX02
SCL33
SDA33
029:8A:032:1A:036:1A
+3.3V
CSS_3.3V
D_GND
RX581 330K
RX500 10K(J)
RX503 56
RX502 56
RX501 56
DAC_GND
LX906 0(X)
LX904 0(X)
RX313 47 [RMX4A]
RX504 47
RX505 47
RX512 NOT MOUNT
CX500 50V22pF
X500 14.32MHz
CX533 50V22pF
[X]
PLL_GND
AVDD_3.3
CSS_3.3V
RX513 3.3K
DACVDD_3.3
DAC_2.5
CVDD_2.5
RX582 330K
RX021 10K
RX020 47
RX022 KETSU
RX023 KETSU
RX024 KETSU
RX002 NOT MOUNT
BODD 036:8D
AD1_VS 036:8D
AD1_HS 036:8D
VCD_BCLK 036:8D
VCD_BDAT
036:8B
RX506 1.5K
RX607 220
CX501 16V 0.1uF
TPX01
TPX04
RX314 KETSU
GPIO0_HBLK 030:2A
GPIO1_HVSW 033:2B
RX578 47K
RESET_G 036:1A:045:5B
RX507 1K
IRQ_1 019:1C
CX932 KETSU
CX934 KETSU
CX933 KETSU
GND
DACVDD_3.3

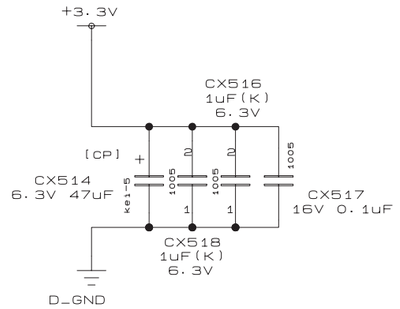
① IOR_Y
② IOR_PB
③ IOR_PR

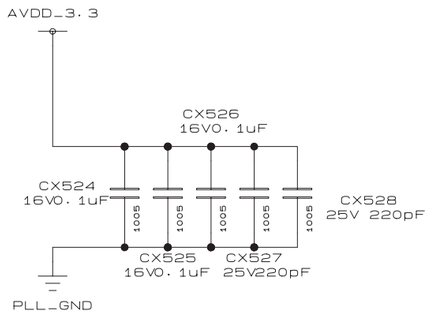
46H84/51H84/57H84
GNESIS (1/3)
SHEET-1/3

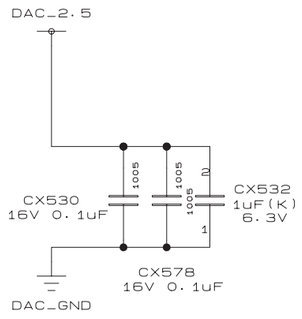
## Capasitor for QX300

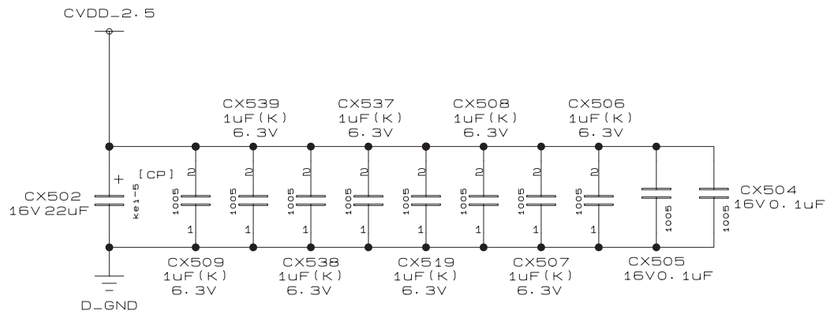


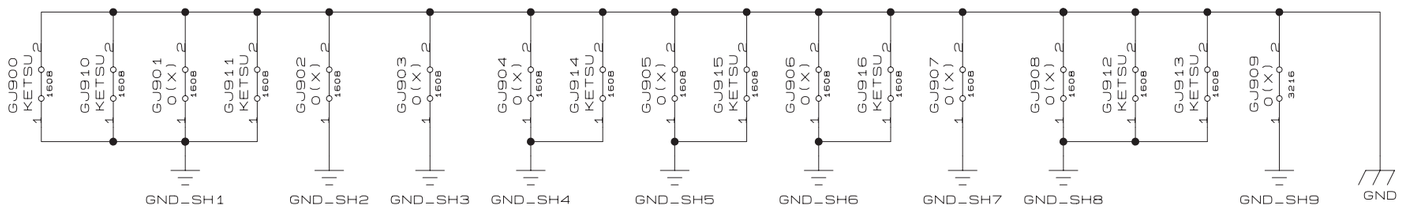



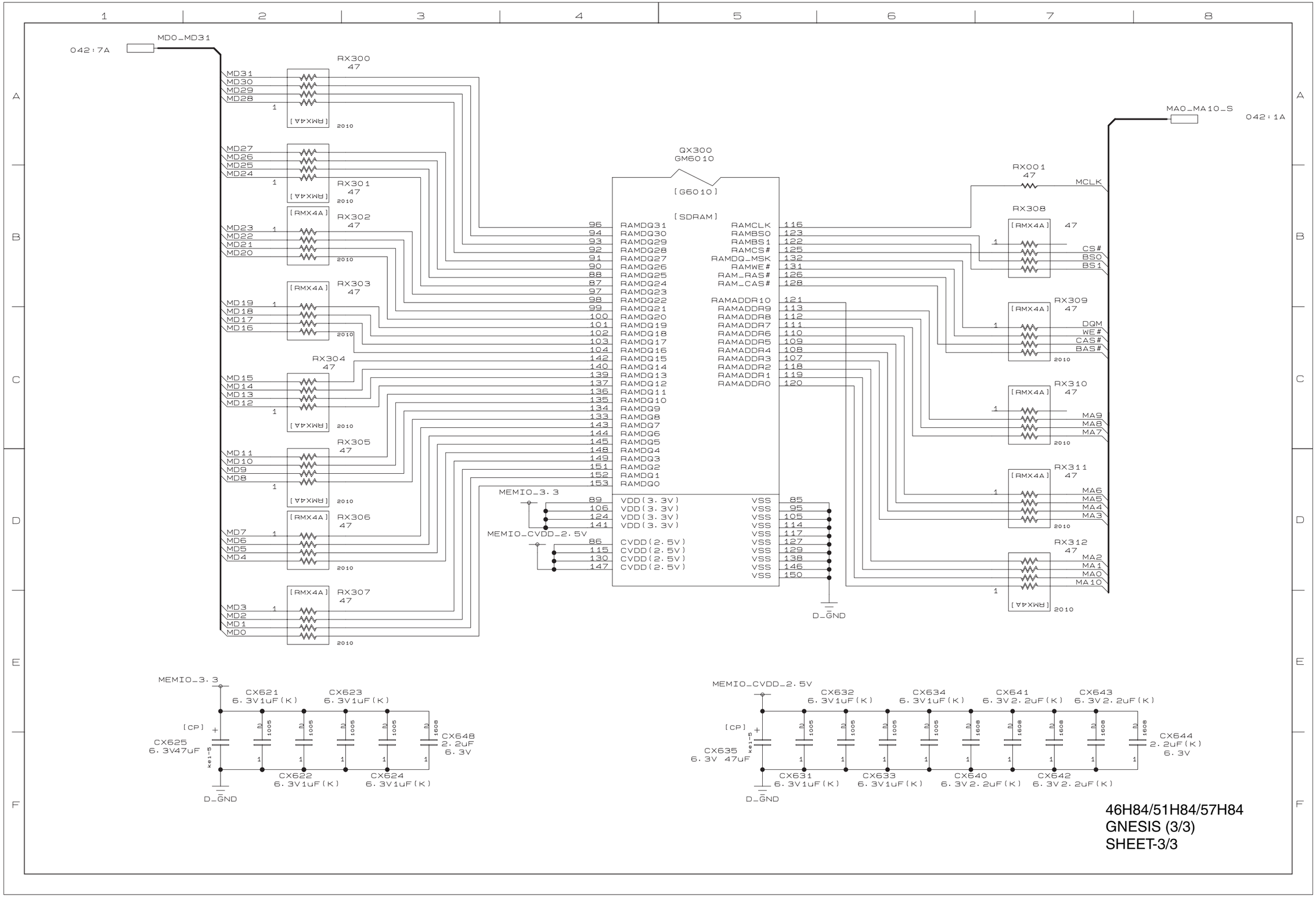



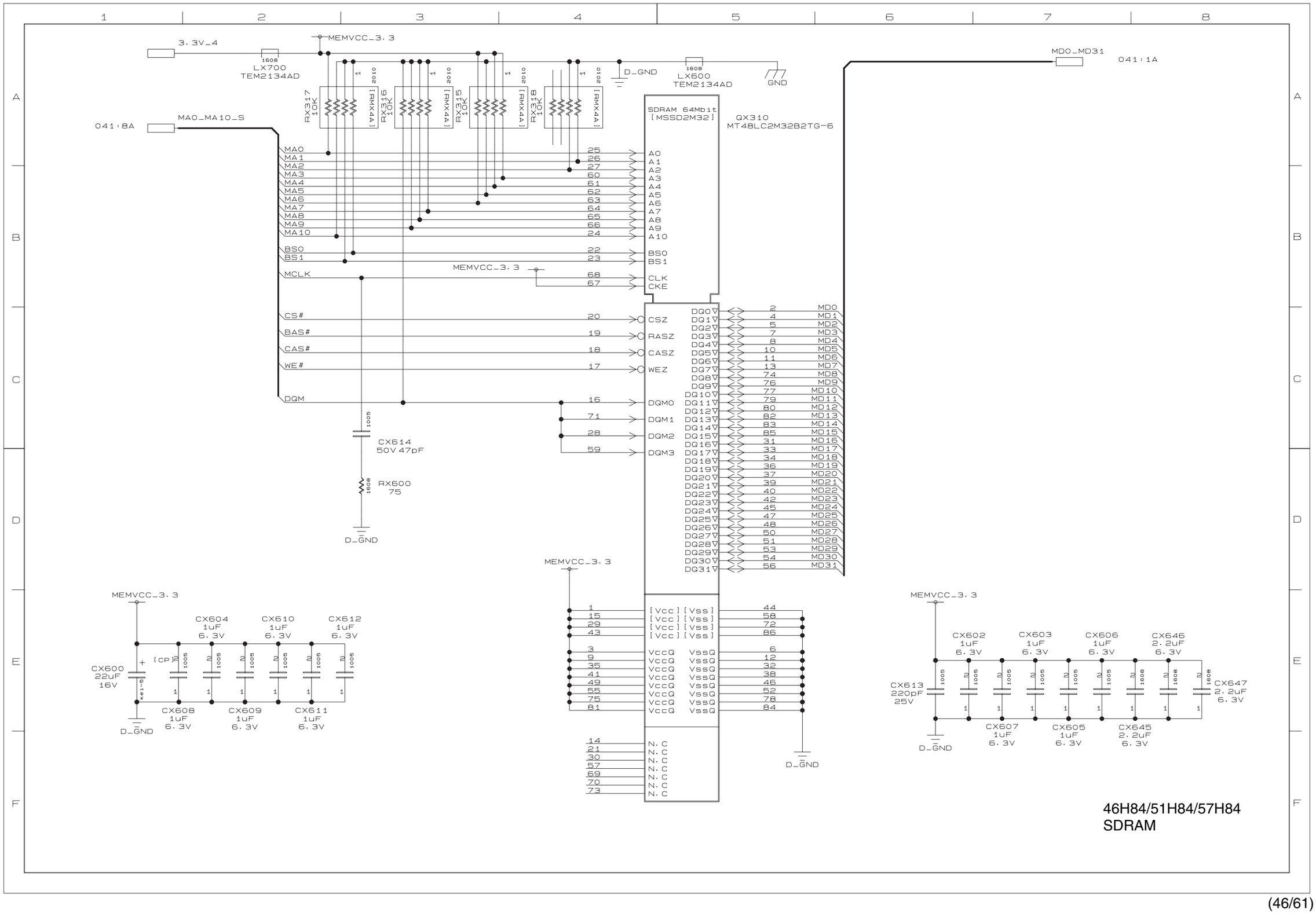



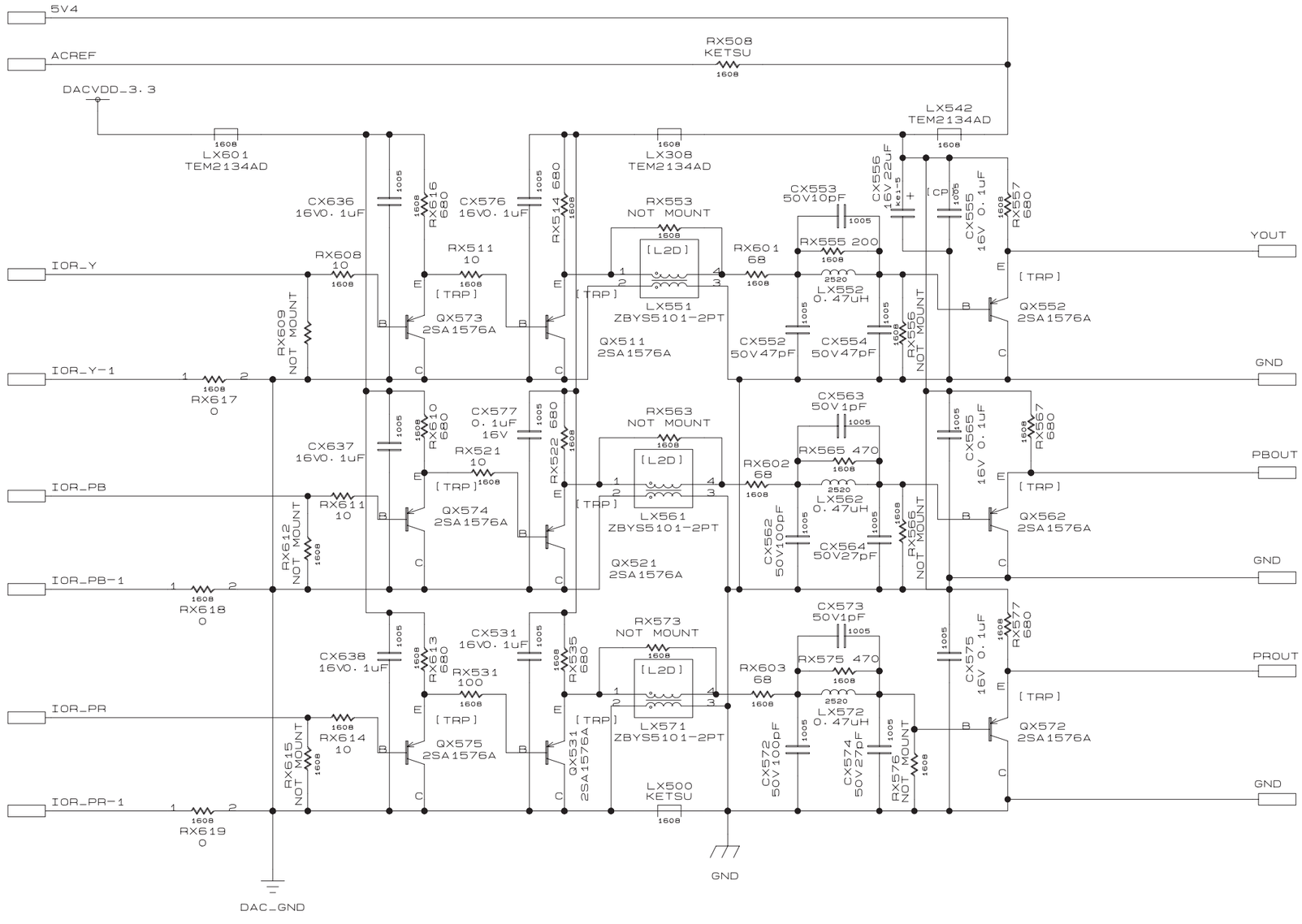

## SHASSIES for GND JUMPER



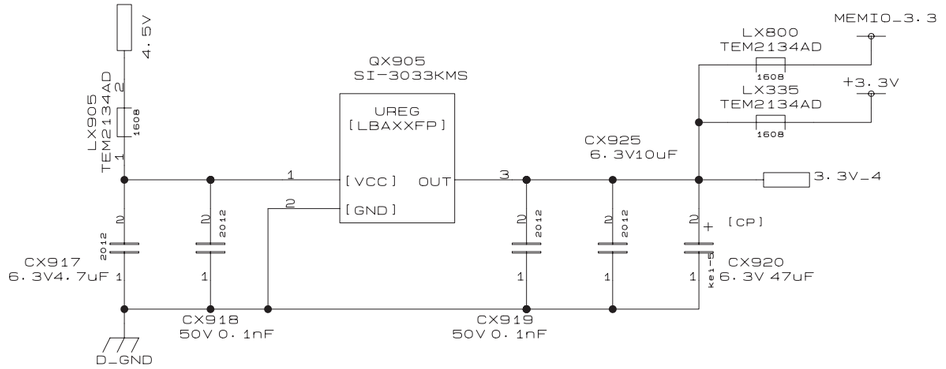

46H84/51H84/57H84
GNESIS (2/3)
SHEET-2/3

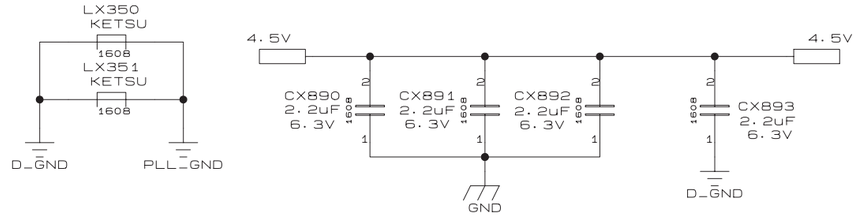

MD0_MD31
042:7A
RX300
47
MD31
MD30
MD29
MD28
[RMX4A]
2010
RX301
47
MD27
MD26
MD25
MD24
RX302
47
MD23
MD22
MD21
MD20
RX303
47
MD19
MD18
MD17
MD16
RX304
47
MD15
MD14
MD13
MD12
RX305
47
MD11
MD10
MD9
MD8
RX306
47
MD7
MD6
MD5
MD4
RX307
47
MD3
MD2
MD1
MD0
QX300
GM6010
[G6010]
[SDRAM]
RAMDQ31 96
RAMDQ30 94
RAMDQ29 93
RAMDQ28 92
RAMDQ27 91
RAMDQ26 90
RAMDQ25 88
RAMDQ24 87
RAMDQ23 97
RAMDQ22 98
RAMDQ21 99
RAMDQ20 100
RAMDQ19 101
RAMDQ18 102
RAMDQ17 103
RAMDQ16 104
RAMDQ15 142
RAMDQ14 140
RAMDQ13 139
RAMDQ12 137
RAMDQ11 136
RAMDQ10 135
RAMDQ9 134
RAMDQ8 133
RAMDQ7 143
RAMDQ6 144
RAMDQ5 145
RAMDQ4 148
RAMDQ3 149
RAMDQ2 151
RAMDQ1 152
RAMDQ0 153
MEMIO_3.3
VDD(3.3V) 89
VDD(3.3V) 106
VDD(3.3V) 124
VDD(3.3V) 141
MEMIO_CVDD_2.5V
CVDD(2.5V) 86
CVDD(2.5V) 115
CVDD(2.5V) 130
CVDD(2.5V) 147
RAMCLK 116
RAMBS0 123
RAMBS1 122
RAMCS# 125
RAMDQ_MSK 132
RAMWE# 131
RAM_RAS# 126
RAM_CAS# 128
RAMADDR10 121
RAMADDR9 113
RAMADDR8 112
RAMADDR7 111
RAMADDR6 110
RAMADDR5 109
RAMADDR4 108
RAMADDR3 107
RAMADDR2 118
RAMADDR1 119
RAMADDR0 120
VSS 85
VSS 95
VSS 105
VSS 114
VSS 117
VSS 127
VSS 129
VSS 138
VSS 146
VSS 150
D_GND
MA0_MA10_S
042:1A
RX001
47
MCLK
RX308
[RMX4A]
47
CS#
BS0
BS1
RX309
47
DQM
WE#
CAS#
BAS#
RX310
47
MA9
MA8
MA7
RX311
47
MA6
MA5
MA4
MA3
RX312
47
MA2
MA1
MA0
MA10
MEMIO_3.3
CX621
6.3V1uF(K)
CX623
6.3V1uF(K)
[CP]
CX625
6.3V47uF
kei-5
1005
CX648
2.2uF
6.3V
1608
CX622
6.3V1uF(K)
CX624
6.3V1uF(K)
D_GND
MEMIO_CVDD_2.5V
CX632
6.3V1uF(K)
CX634
6.3V1uF(K)
CX641
6.3V2.2uF(K)
CX643
6.3V2.2uF(K)
CX635
6.3V 47uF
CX644
2.2uF(K)
6.3V
CX631
6.3V1uF(K)
CX633
6.3V1uF(K)
CX640
6.3V2.2uF(K)
CX642
6.3V2.2uF(K)
D_GND
46H84/51H84/57H84
GNESIS (3/3)
SHEET-3/3

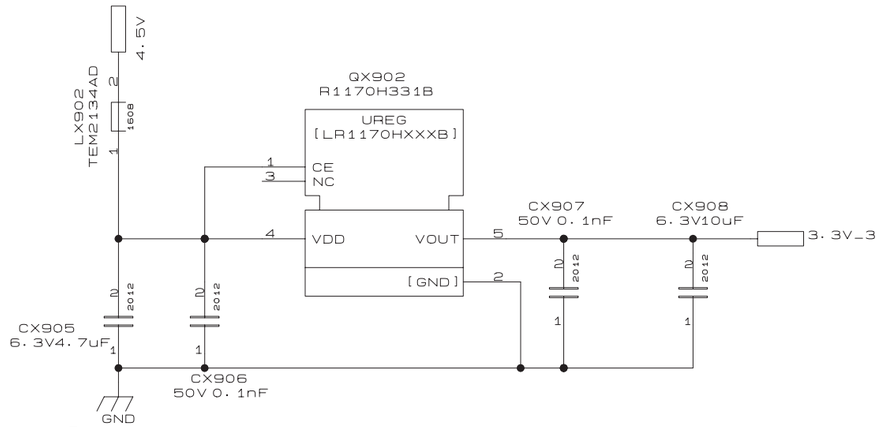

3.3V_4
MEMVCC_3.3
LX700
TEM2134AD
D_GND
LX600
TEM2134AD
GND
MD0_MD31
041:1A
041:8A
MA0_MA10_S
RX317 10K [RMX4A]
RX316 10K [RMX4A]
RX315 10K [RMX4A]
RX318 10K [RMX4A]
SDRAM 64Mbit [MSSD2M32]
QX310
MT48LC2M32B2TG-6
MA0
MA1
MA2
MA3
MA4
MA5
MA6
MA7
MA8
MA9
MA10
BS0
BS1
MCLK
CS#
BAS#
CAS#
WE#
DQM
A0
A1
A2
A3
A4
A5
A6
A7
A8
A9
A10
BS0
BS1
CLK
CKE
CSZ
RASZ
CASZ
WEZ
DQM0
DQM1
DQM2
DQM3
DQ0
DQ1
DQ2
DQ3
DQ4
DQ5
DQ6
DQ7
DQ8
DQ9
DQ10
DQ11
DQ12
DQ13
DQ14
DQ15
DQ16
DQ17
DQ18
DQ19
DQ20
DQ21
DQ22
DQ23
DQ24
DQ25
DQ26
DQ27
DQ28
DQ29
DQ30
DQ31
MD0
MD1
MD2
MD3
MD4
MD5
MD6
MD7
MD8
MD9
MD10
MD11
MD12
MD13
MD14
MD15
MD16
MD17
MD18
MD19
MD20
MD21
MD22
MD23
MD24
MD25
MD26
MD27
MD28
MD29
MD30
MD31
CX614
50V 47pF
RX600
75
D_GND
MEMVCC_3.3
[Vcc]
[Vss]
VccQ
VssQ
N.C
CX600
22uF
16V
CX604
1uF
6.3V
CX610
1uF
6.3V
CX612
1uF
6.3V
CX608
1uF
6.3V
CX609
1uF
6.3V
CX611
1uF
6.3V
CX602
1uF
6.3V
CX603
1uF
6.3V
CX606
1uF
6.3V
CX646
2.2uF
6.3V
CX613
220pF
25V
CX607
1uF
6.3V
CX605
1uF
6.3V
CX645
2.2uF
6.3V
CX647
2.2uF
6.3V
46H84/51H84/57H84
SDRAM

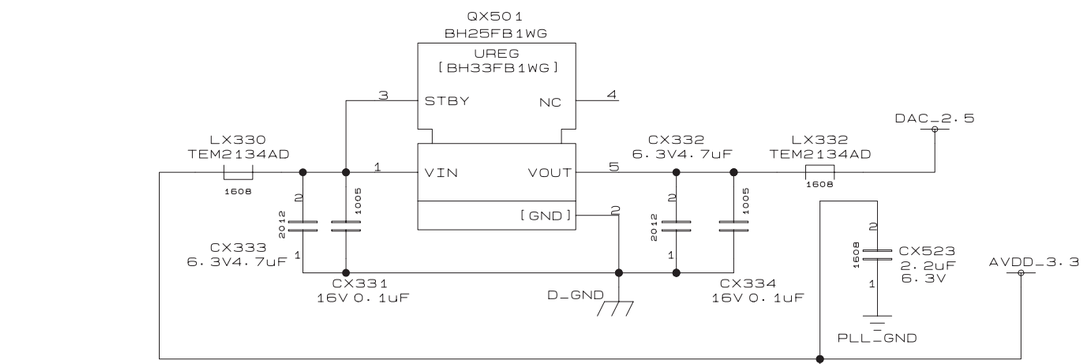


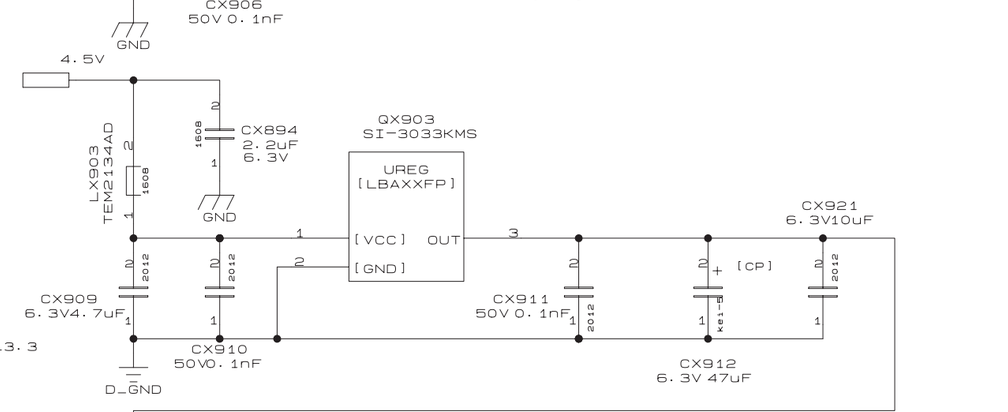

46H84/51H84/57H84
GNESIS OUT

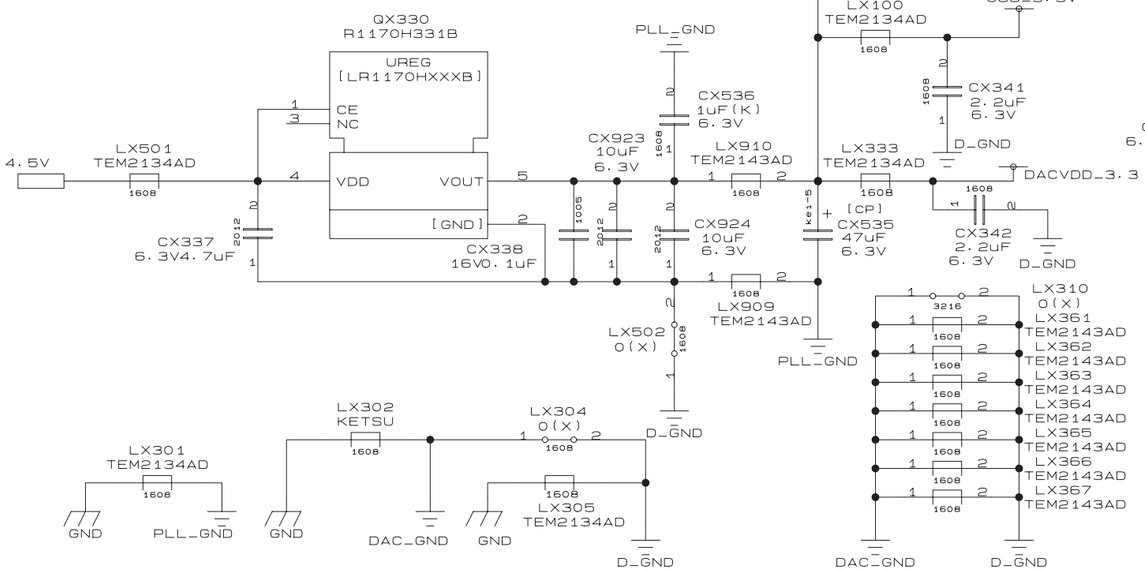


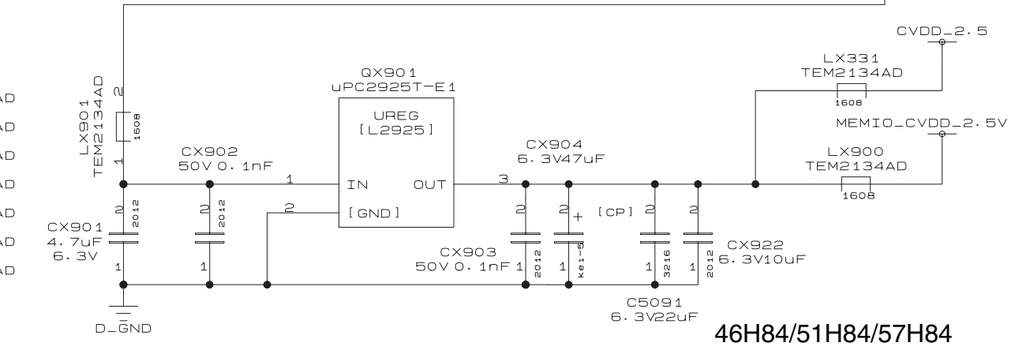



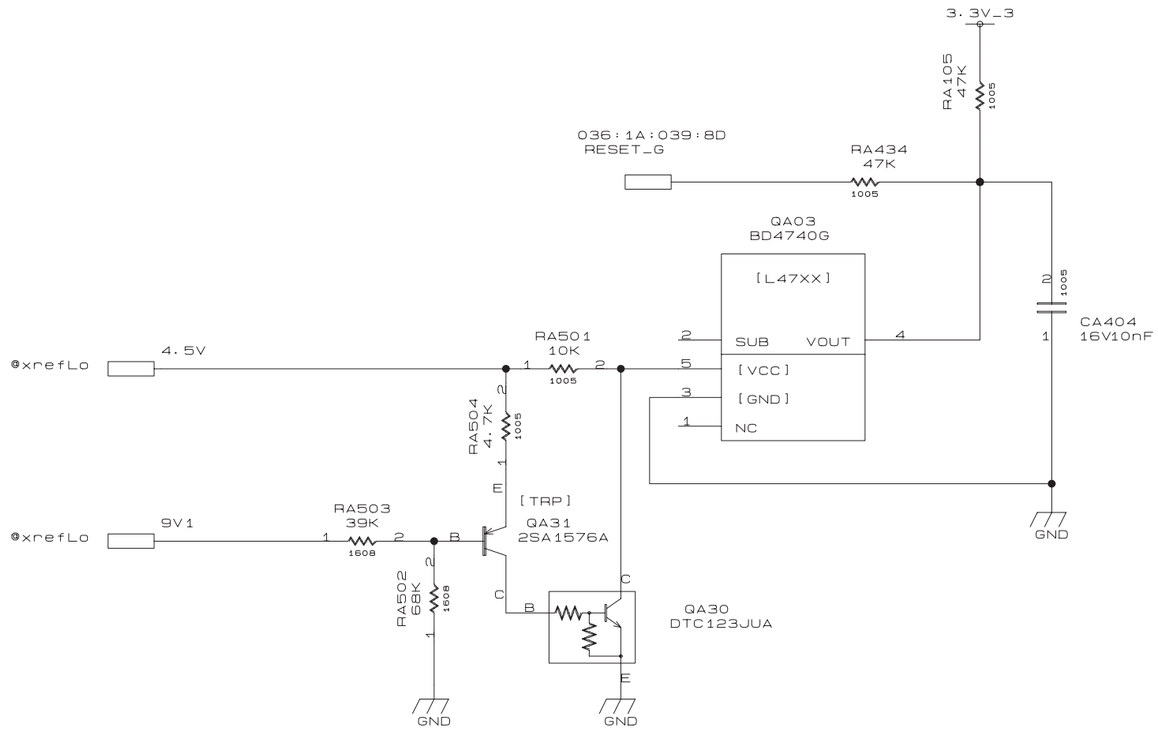



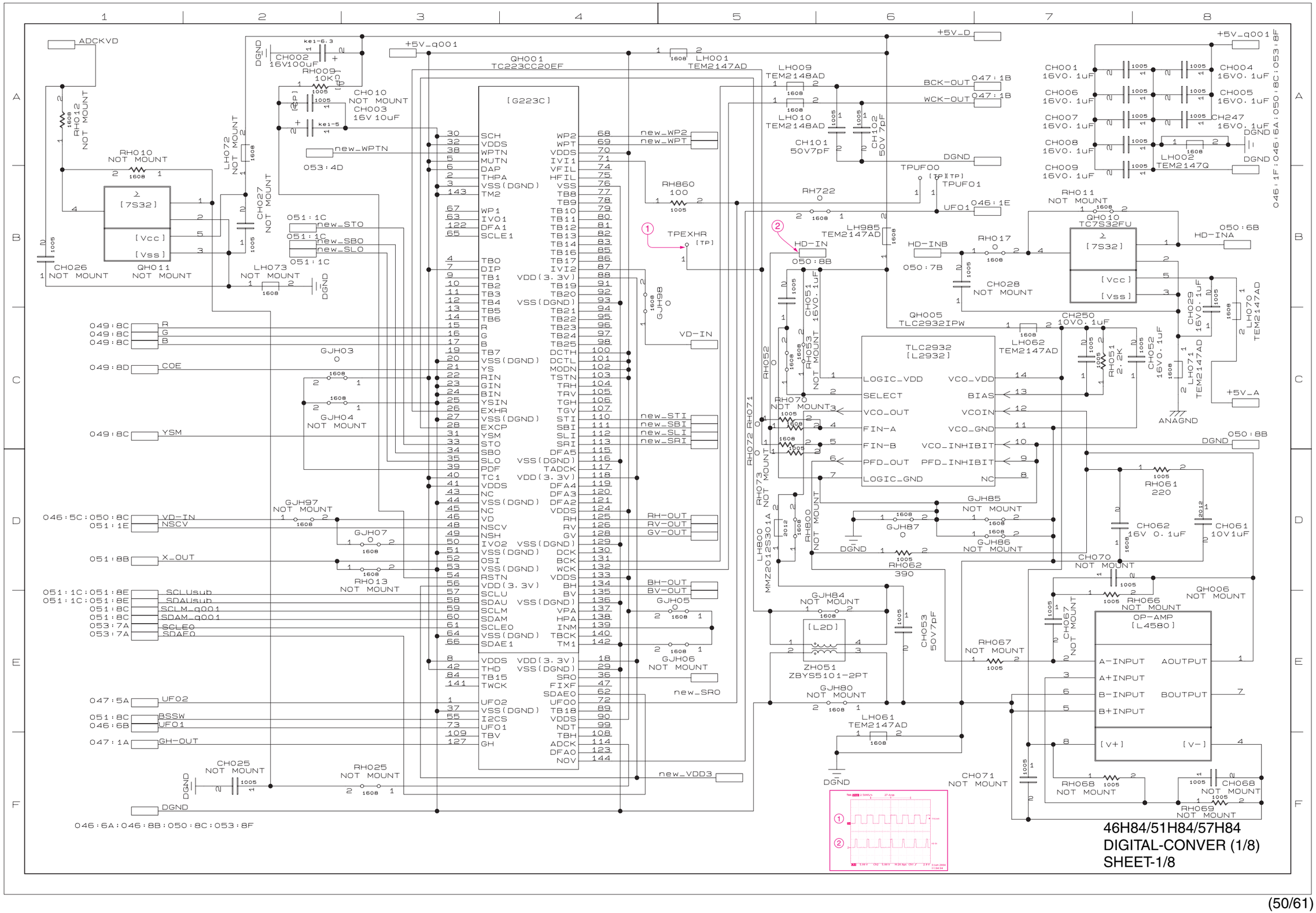



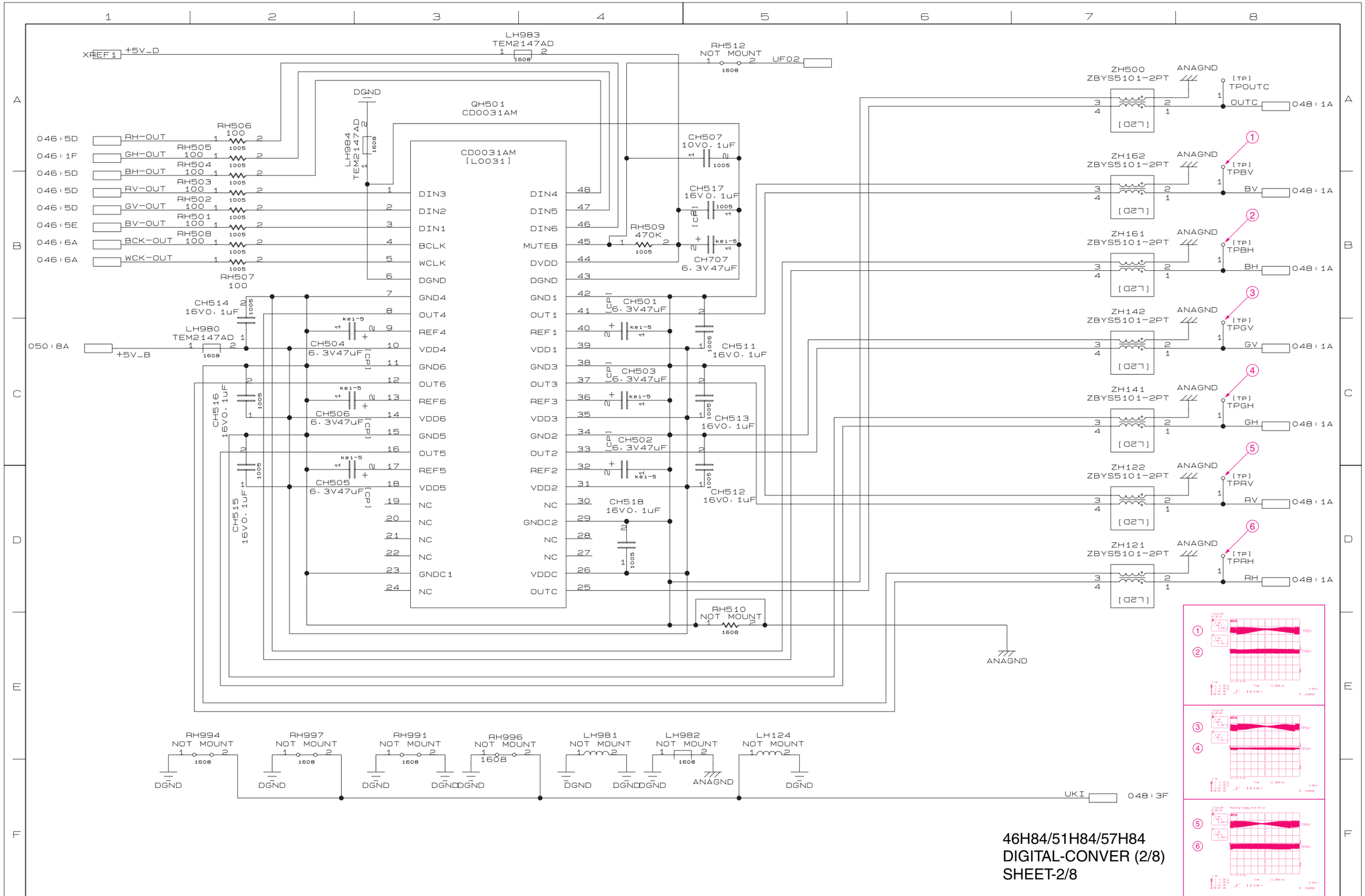

46H84/51H84/57H84
GNESIS REG

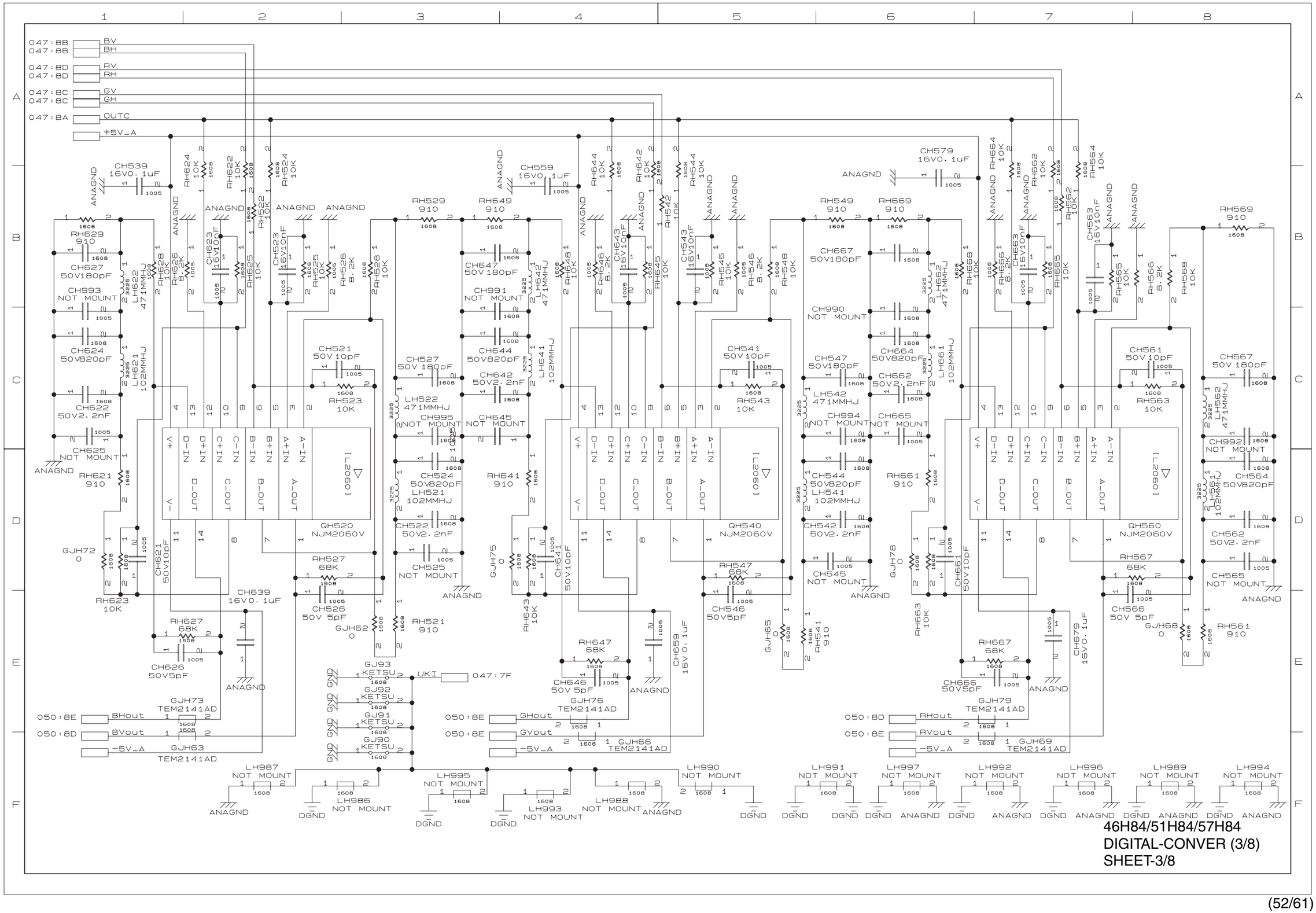



46H84/51H84/57H84
CPU

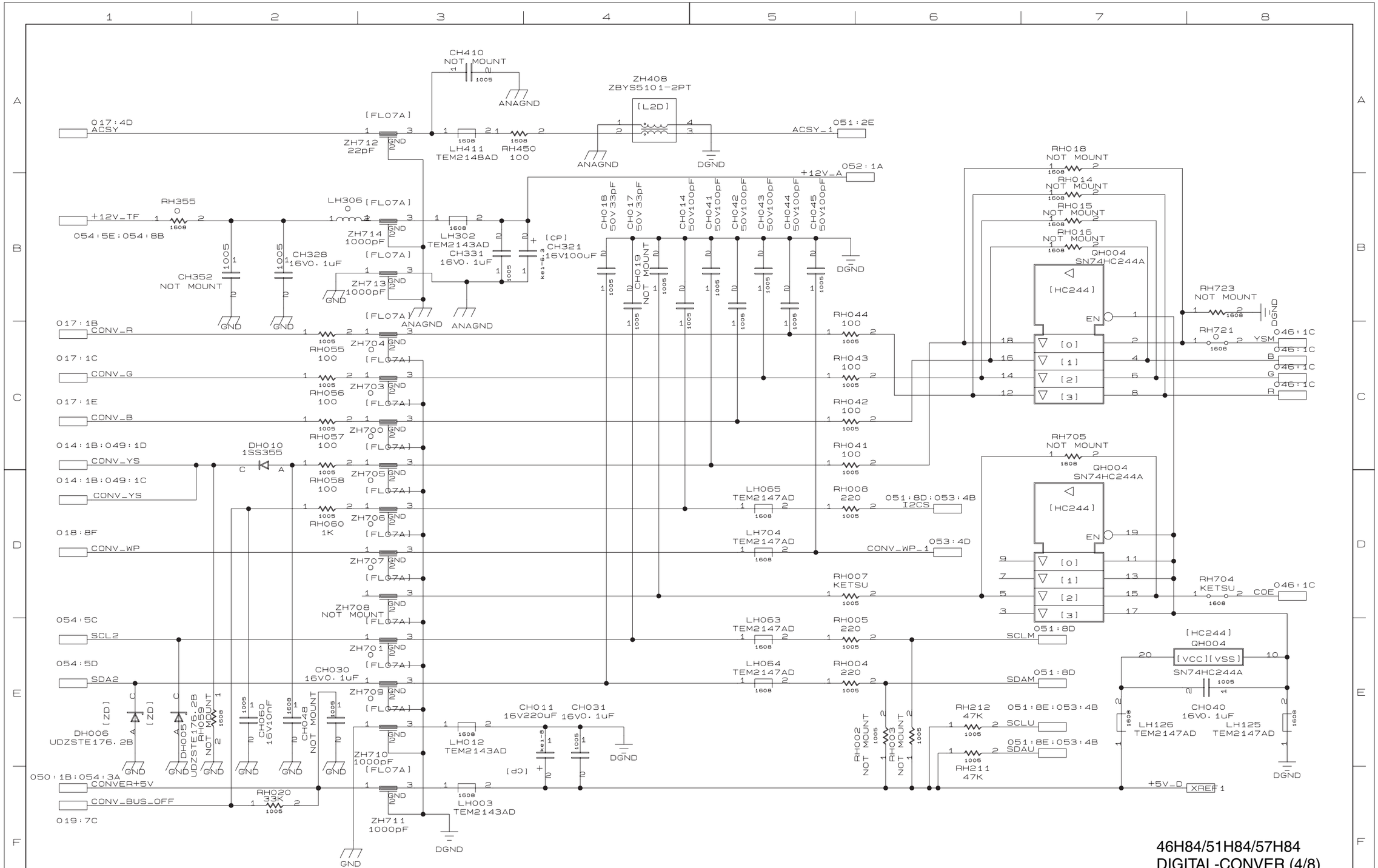

ADCKVD
CH002 16V100uF
RH009 10K
CH010 NOT MOUNT
CH003 16V 10uF
RH012 NOT MOUNT
RH010 NOT MOUNT
LH072 NOT MOUNT
CH027 NOT MOUNT
QH011 NOT MOUNT
[7S32]
[Vcc]
[Vss]
CH026 NOT MOUNT
LH073 NOT MOUNT
new_WPTN
053:4D
051:1C new_STO
051:1C new_SBO
new_SLO
051:1C
+5V_q001
QH001 TC223CC20EF
[G223C]
LH001 TEM2147AD
RH860 100
TPEXHR
VD-IN
GJH98 0
GJH03 0
GJH04 NOT MOUNT
049:8C R
049:8C G
049:8C B
049:8D COE
049:8C YSM
GJH97 NOT MOUNT
046:5C:050:8C VD-IN
051:1E NSCV
GJH07 0
051:8B X_OUT
RH013 NOT MOUNT
051:1C:051:8E SCLUsub
051:1C:051:8E SDAUsub
051:8C SCLM_q001
051:8C SDAM_q001
053:7A SCLE0
053:7A SDAE0
047:5A UF02
051:8C BSSW
046:6B UFO1
047:1A GH-OUT
CH025 NOT MOUNT
RH025 NOT MOUNT
DGND
new_WP2
new_WPT
new_STI
new_SBI
new_SLI
new_SRI
RH-OUT
RV-OUT
GV-OUT
BH-OUT
BV-OUT
GJH05 0
GJH06 NOT MOUNT
new_SRO
new_VDD3
LH009 TEM2148AD
LH010 TEM2148AD
CH101 50V7pF
CH102 50V 7pF
BCK-OUT 047:1B
WCK-OUT 047:1B
TPUF00
TPUF01
UFO1 046:1E
RH722 0
LH985 TEM2147AD
HD-IN 050:8B
HD-INB 050:7B
RH017 0
CH028 NOT MOUNT
QH005 TLC2932IPW
TLC2932 [L2932]
LOGIC_VDD
SELECT
VCO_OUT
FIN-A
FIN-B
PFD_OUT
LOGIC_GND
VCO_VDD
BIAS
VCOIN
VCO_GND
VCO_INHIBIT
PFD_INHIBIT
NC
RH052 0
CH051 16V0.1uF
RH053 NOT MOUNT
RH070 NOT MOUNT
RH072 RH071 0
RH073 NOT MOUNT
LH800 MMZ2012S301A
RH800 NOT MOUNT
GJH84 NOT MOUNT
[L2D]
ZH051 ZBYS5101-2PT
GJH80 NOT MOUNT
LH061 TEM2147AD
CH053 50V7pF
GJH85 NOT MOUNT
GJH87 0
GJH86 NOT MOUNT
RH062 390
CH071 NOT MOUNT
LH062 TEM2147AD
CH250 10V0.1uF
RH051 2.2K
CH052 16V0.1uF
LH071 TEM2147AD
CH029 16V0.1uF
LH070 TEM2147AD
ANAGND
+5V_A
RH011 NOT MOUNT
QH010 TC7S32FU
HD-INA 050:6B
RH061 220
CH062 16V 0.1uF
CH061 10V1uF
CH070 NOT MOUNT
RH066 NOT MOUNT
QH006 NOT MOUNT
CH067 NOT MOUNT
RH067 NOT MOUNT
OP-AMP [L4580]
A-INPUT
A+INPUT
B-INPUT
B+INPUT
AOUTPUT
BOUTPUT
[V+]
[V-]
RH068 NOT MOUNT
CH068 NOT MOUNT
RH069 NOT MOUNT
+5V_D
CH001 16V0.1uF
CH004 16V0.1uF
CH006 16V0.1uF
CH005 16V0.1uF
CH007 16V0.1uF
CH247 16V0.1uF
CH008 16V0.1uF
LH002 TEM2147Q
CH009 16V0.1uF
046:1F:046:6A:050:8C:053:8F
046:6A:046:8B:050:8C:053:8F
46H84/51H84/57H84
DIGITAL-CONVER (1/8)
SHEET-1/8

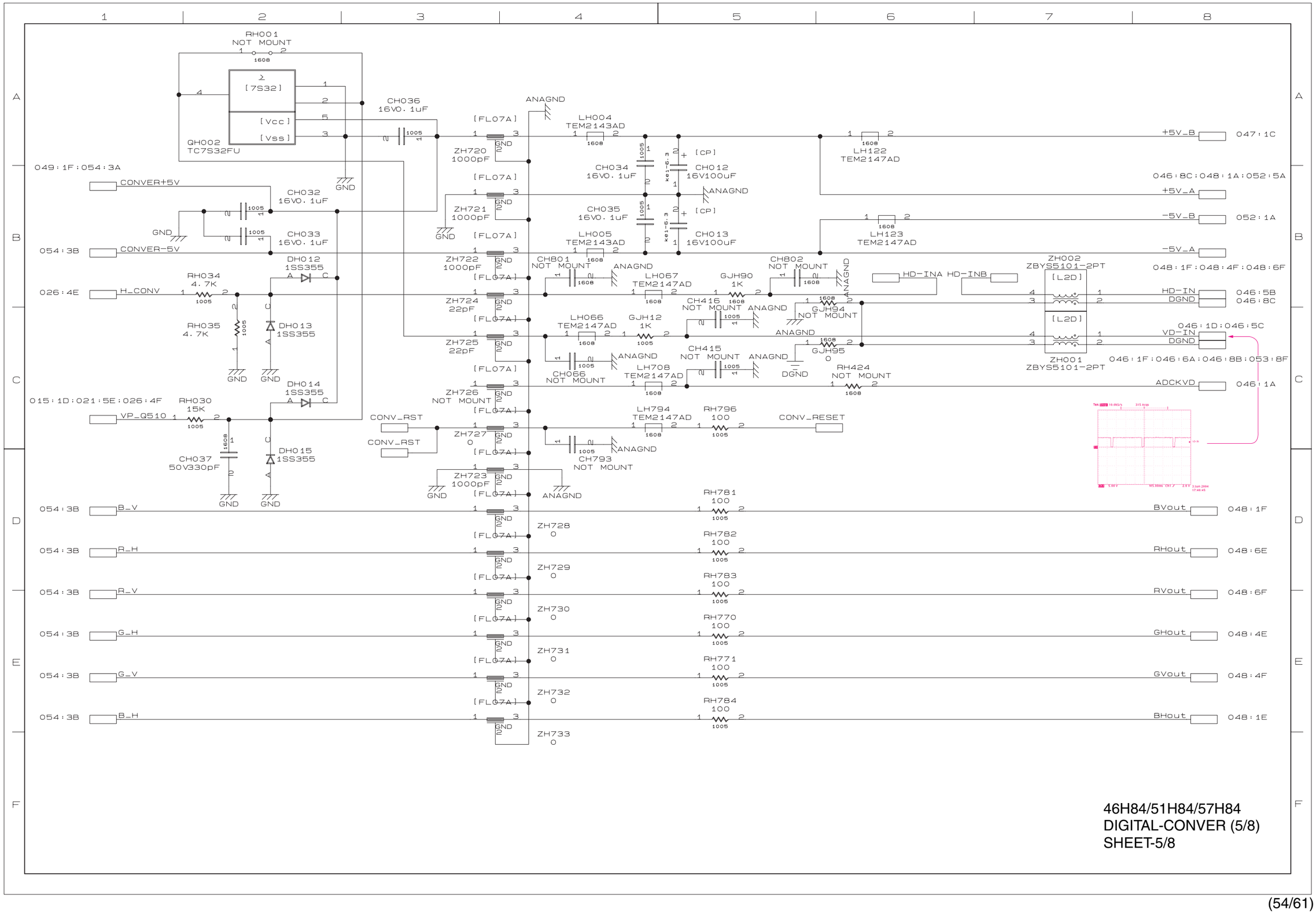
(50/61)


LH983 TEM2147AD
RH512 NOT MOUNT
UF02
XREF1 +5V_D
DGND
LH984 TEM2147AD
QH501 CD0031AM
CD0031AM [L0031]
RH506 100
RH505 100
RH504 100
RH503 100
RH502 100
RH501 100
RH508 100
RH507 100
046:5D RH-OUT
046:1F GH-OUT
046:5D BH-OUT
046:5D RV-OUT
046:5D GV-OUT
046:5E BV-OUT
046:6A BCK-OUT
046:6A WCK-OUT
DIN3 DIN2 DIN1 BCLK WCLK DGND GND4 OUT4 REF4 VDD4 GND6 OUT6 REF6 VDD6 GND5 OUT5 REF5 VDD5 NC NC NC NC GNDC1 NC
DIN4 DIN5 DIN6 MUTEB DVDD DGND GND1 OUT1 REF1 VDD1 GND3 OUT3 REF3 VDD3 GND2 OUT2 REF2 VDD2 NC GNDC2 NC NC VDDC OUTC
CH507 10V0.1uF
CH517 16V0.1uF
CH707 6.3V47uF
RH509 470K
CH501 6.3V47uF
CH503 6.3V47uF
CH502 6.3V47uF
CH511 16V0.1uF
CH513 16V0.1uF
CH512 16V0.1uF
CH518 16V0.1uF
CH514 16V0.1uF
CH504 6.3V47uF
CH506 6.3V47uF
CH505 6.3V47uF
CH516 16V0.1uF
CH515 16V0.1uF
LH980 TEM2147AD
050:8A +5V_B
RH510 NOT MOUNT
ANAGND
ZH500 ZBYS5101-2PT
ZH162 ZBYS5101-2PT
ZH161 ZBYS5101-2PT
ZH142 ZBYS5101-2PT
ZH141 ZBYS5101-2PT
ZH122 ZBYS5101-2PT
ZH121 ZBYS5101-2PT
[TP] TPOUTC OUTC 048:1A
[TP] TPBV BV 048:1A
[TP] TPBH BH 048:1A
[TP] TPGV GV 048:1A
[TP] TPGH GH 048:1A
[TP] TPRV RV 048:1A
[TP] TPRH RH 048:1A
RH994 NOT MOUNT
RH997 NOT MOUNT
RH991 NOT MOUNT
RH996 NOT MOUNT
LH981 NOT MOUNT
LH982 NOT MOUNT
LH124 NOT MOUNT
UKI 048:3F
46H84/51H84/57H84
DIGITAL-CONVER (2/8)
SHEET-2/8

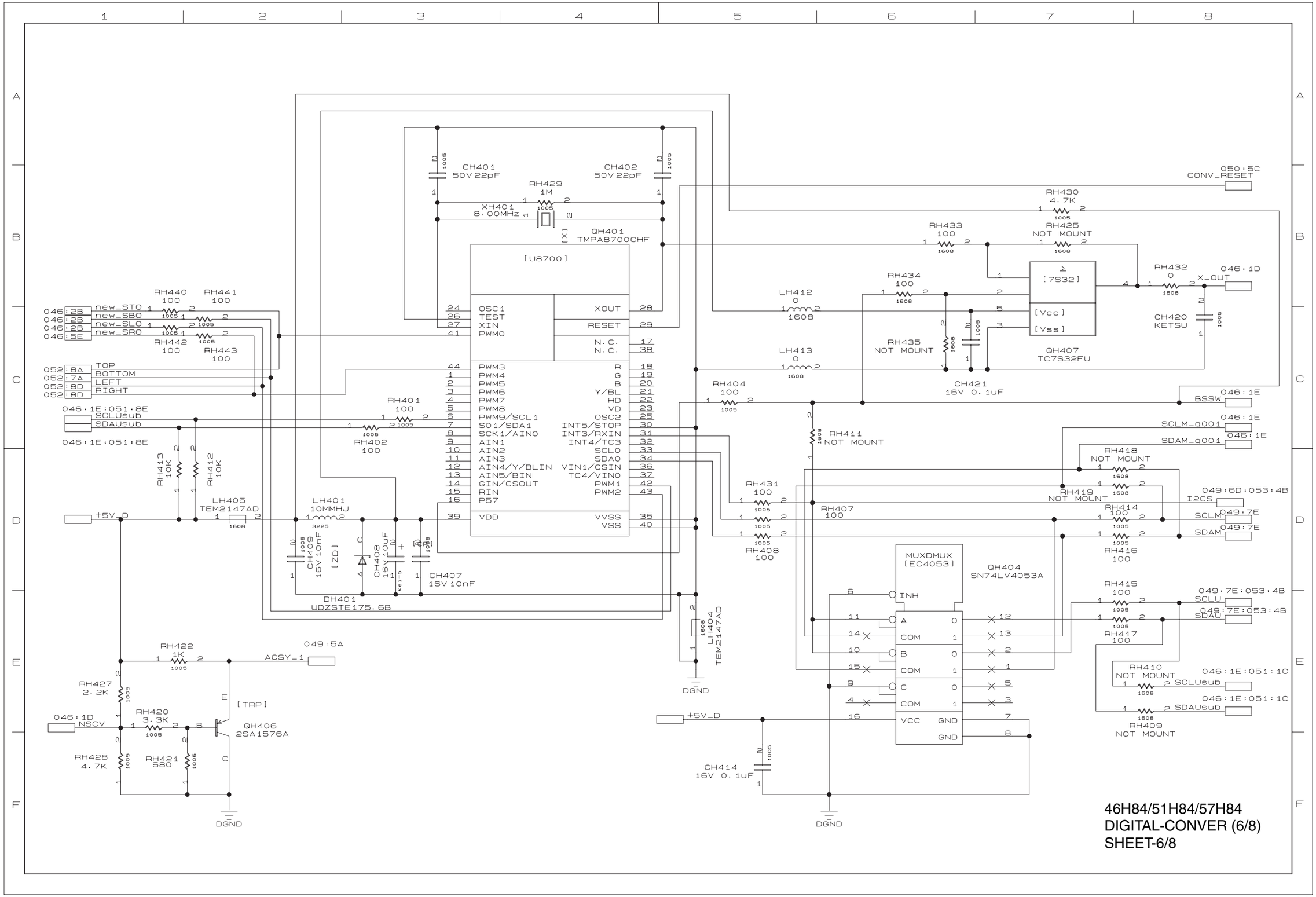


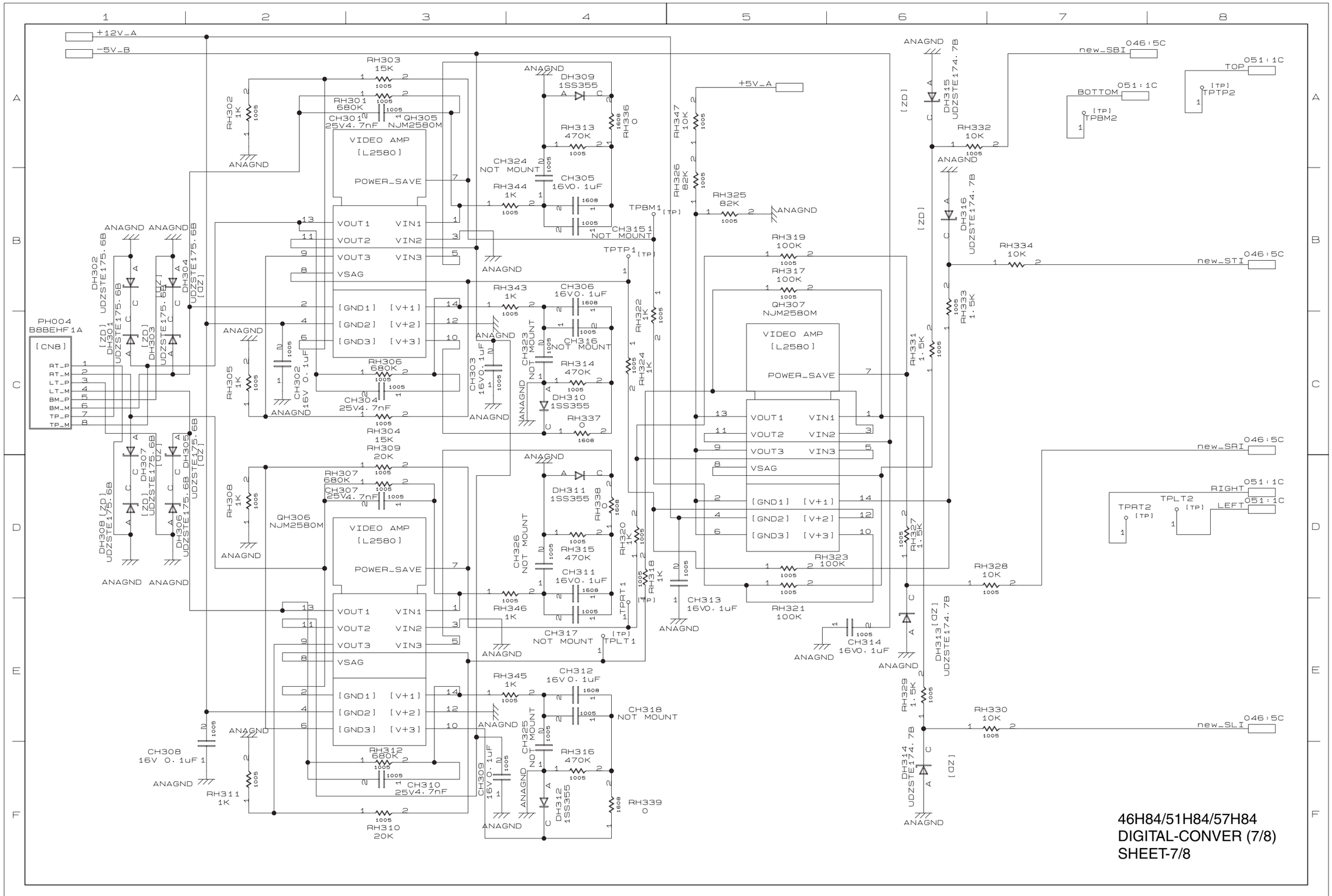

46H84/51H84/57H84
DIGITAL-CONVER (3/8)
SHEET-3/8

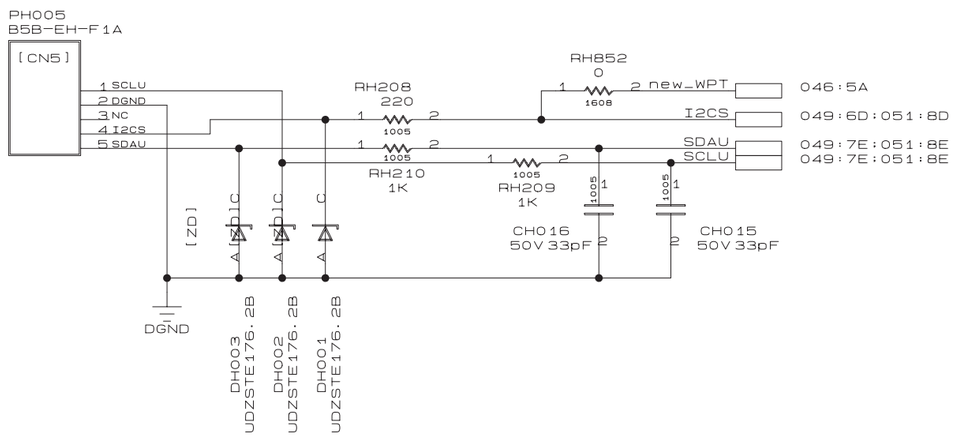

CH410
NOT MOUNT
ANAGND
ZH408
ZBYS5101-2PT
[L2D]
017:4D
ACSY
[FL07A]
ZH712
22pF
LH411
TEM2148AD
RH450
100
ANAGND
DGND
ACSY_1
051:2E
+12V_A
052:1A
RH355
+12V_TF
054:5E:054:8B
LH306
ZH714
1000pF
LH302
TEM2143AD
CH331
16V0.1uF
[CP]
CH321
16V100uF
CH328
16V0.1uF
CH352
NOT MOUNT
ZH713
1000pF
CH018
50V33pF
CH017
50V33pF
CH019
NOT MOUNT
CH014
50V100pF
CH041
50V100pF
CH042
50V100pF
CH043
50V100pF
CH044
50V100pF
CH045
50V100pF
DGND
017:1B
CONV_R
RH055
100
ZH704
RH044
100
017:1C
CONV_G
RH056
100
ZH703
RH043
100
017:1E
CONV_B
RH057
100
ZH700
RH042
100
014:1B:049:1D
CONV_YS
DH010
1SS355
RH058
100
ZH705
RH041
100
014:1B:049:1C
CONV_YS
LH065
TEM2147AD
RH008
220
051:8D:053:4B
I2CS
RH060
1K
ZH706
018:8F
CONV_WP
LH704
TEM2147AD
053:4D
CONV_WP_1
ZH707
RH007
KETSU
ZH708
NOT MOUNT
054:5C
SCL2
LH063
TEM2147AD
RH005
220
SCLM
051:8D
ZH701
054:5D
SDA2
LH064
TEM2147AD
RH004
220
SDAM
051:8D
CH030
16V0.1uF
ZH709
DH006
UDZSTE176.2B
DH005
UDZSTE176.2B
RH059
NOT MOUNT
CH060
16V10nF
CH048
NOT MOUNT
CH011
16V220uF
CH031
16V0.1uF
ZH710
1000pF
LH012
TEM2143AD
RH002
NOT MOUNT
RH003
NOT MOUNT
RH212
47K
SCLU
051:8E:053:4B
RH211
47K
SDAU
051:8E:053:4B
050:1B:054:3A
CONVER+5V
CONV_BUS_OFF
019:7C
RH020
33K
ZH711
1000pF
LH003
TEM2143AD
RH018
NOT MOUNT
RH014
NOT MOUNT
RH015
NOT MOUNT
RH016
NOT MOUNT
QH004
SN74HC244A
[HC244]
EN
[0]
[1]
[2]
[3]
RH723
NOT MOUNT
RH721
046:1C
YSM
B
G
R
RH705
NOT MOUNT
RH704
KETSU
COE
046:1C
[HC244]
QH004
[VCC][VSS]
SN74HC244A
CH040
16V0.1uF
LH126
TEM2147AD
LH125
TEM2147AD
+5V_D
XREF
46H84/51H84/57H84
DIGITAL-CONVER (4/8)
SHEET-4/8

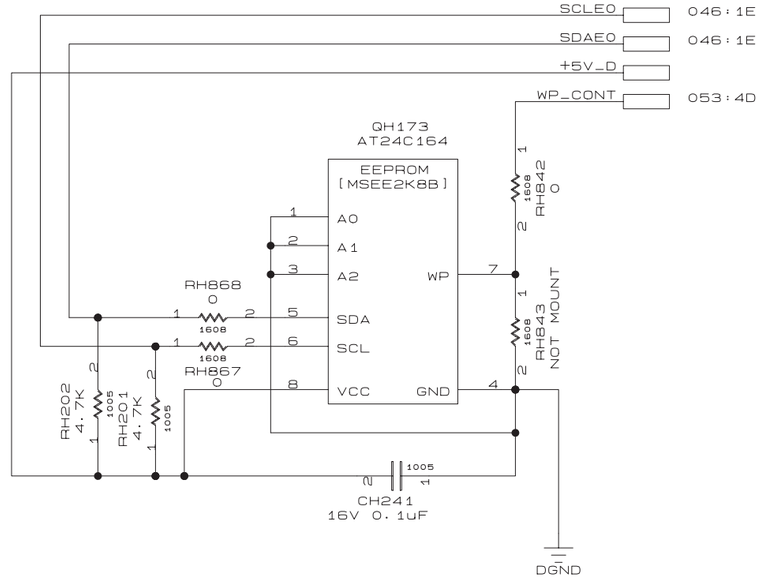


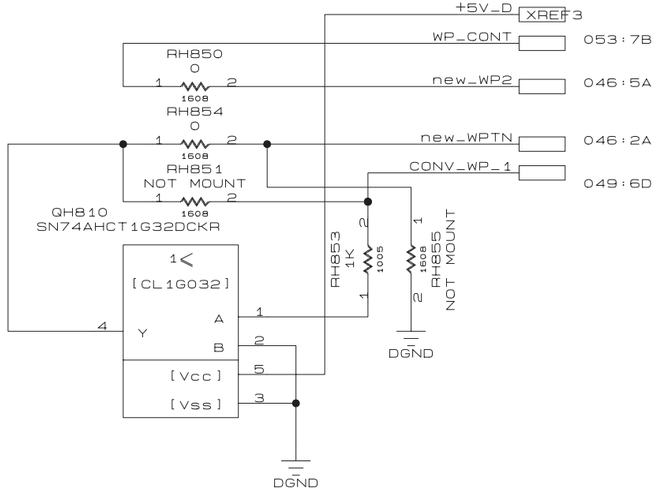

46H84/51H84/57H84
DIGITAL-CONVER (5/8)
SHEET-5/8

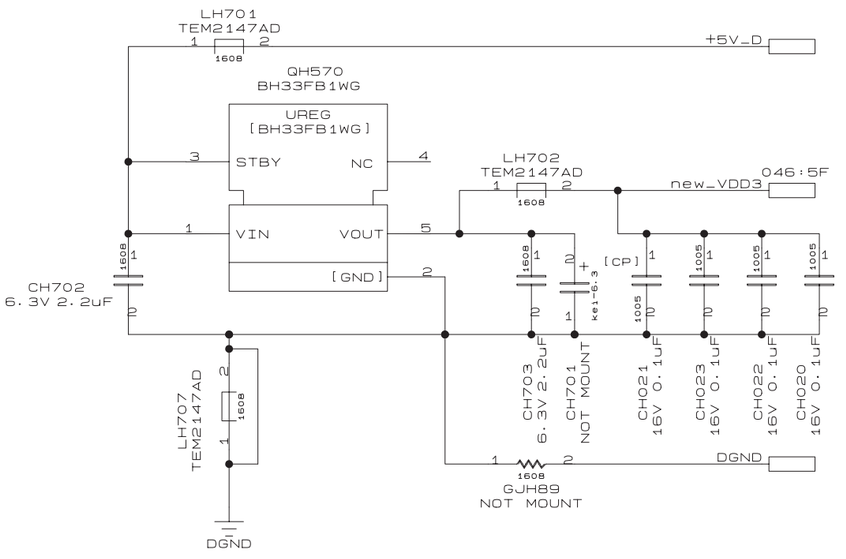

CH401 50V 22pF
CH402 50V 22pF
RH429 1M
XH401 8.00MHz
QH401 TMPA8700CHF
[U8700]
OSC1
TEST
XIN
PWM0
XOUT
RESET
N.C.
N.C.
PWM3
PWM4
PWM5
PWM6
PWM7
PWM8
PWM9/SCL1
SO1/SDA1
SCK1/AINO
AIN1
AIN2
AIN3
AIN4/Y/BLIN
AIN5/BIN
GIN/CSOUT
RIN
P57
R
G
B
Y/BL
HD
VD
OSC2
INT5/STOP
INT3/RXIN
INT4/TC3
SCL0
SDA0
VIN1/CSIN
TC4/VINO
PWM1
PWM2
VDD
VVSS
VSS
RH440 100
RH441 100
RH442 100
RH443 100
new_STO
new_SBO
new_SLO
new_SRO
TOP
BOTTOM
LEFT
RIGHT
RH401 100
RH402 100
RH413 10K
RH412 10K
LH405 TEM2147AD
LH401 10MMHJ
CH409 16V 10nF
CH408 16V 10uF
CH407 16V 10nF
DH401 UDZSTE175.6B
RH422 1K
RH427 2.2K
RH420 3.3K
RH428 4.7K
RH421 680
QH406 2SA1576A
[TRP]
ACSY_1
NSCV
SCLUsub
SDAUsub
+5V_D
DGND
RH430 4.7K
RH433 100
RH425 NOT MOUNT
RH434 100
RH435 NOT MOUNT
LH412 0 1608
LH413 0 1608
RH404 100
RH411 NOT MOUNT
RH431 100
RH407 100
RH408 100
LH404 TEM2147AD
CH421 16V 0.1uF
CH414 16V 0.1uF
[7S32]
[Vcc]
[Vss]
QH407 TC7S32FU
RH432 0
CH420 KETSU
X_OUT
CONV_RESET
BSSW
SCLM_q001
SDAM_q001
RH418 NOT MOUNT
RH419 NOT MOUNT
RH414 100
RH416 100
I2CS
SCLM
SDAM
MUXDMUX [EC4053]
QH404 SN74LV4053A
INH
A
B
C
COM
VCC
GND
RH415 100
RH417 100
SCLU
SDAU
RH410 NOT MOUNT
RH409 NOT MOUNT
SCLUsub
SDAUsub
046:2B
046:5E
052:8A
052:7A
052:8D
046:1E:051:8E
049:5A
046:1D
050:5C
046:1D
046:1E
049:6D:053:4B
049:7E
049:7E:053:4B
046:1E:051:1C
046:1E:051:1C
46H84/51H84/57H84
DIGITAL-CONVER (6/8)
SHEET-6/8


+12V_A
-5V_B
ANAGND
RH303 15K
RH301 680K
CH301 25V4.7nF
QH305 NJM2580M
RH302 1K
DH309 1SS355
RH313 470K
RH336 0
CH324 NOT MOUNT
CH305 16V0.1uF
RH344 1K
CH315 NOT MOUNT
TPBM1 [TP]
VIDEO AMP [L2580]
POWER_SAVE
VOUT1 VIN1
VOUT2 VIN2
VOUT3 VIN3
VSAG
[GND1] [V+1]
[GND2] [V+2]
[GND3] [V+3]
TPTP1 [TP]
RH343 1K
CH306 16V0.1uF
CH316 NOT MOUNT
CH303 16V0.1uF
CH323 NOT MOUNT
RH314 470K
DH310 1SS355
RH337 0
RH322 1K
RH324 1K
CH302 16V 0.1uF
RH305 1K
RH306 680K
CH304 25V4.7nF
RH304 15K
RH309 20K
RH307 680K
CH307 25V4.7nF
QH306 NJM2580M
RH308 1K
DH311 1SS355
RH338 0
RH315 470K
CH326 NOT MOUNT
CH311 16V0.1uF
RH320 1K
RH318 1K
RH346 1K
CH317 NOT MOUNT
TPLT1 [TP]
RH345 1K
CH312 16V0.1uF
CH318 NOT MOUNT
CH325 NOT MOUNT
RH316 470K
DH312 1SS355
RH339 0
CH309 16V0.1uF
CH310 25V4.7nF
RH312 680K
RH310 20K
CH308 16V 0.1uF
RH311 1K
PH004 B8B8HF1A
[CN8]
RT_P
RT_M
LT_P
LT_M
BM_P
BM_M
TP_P
TP_M
DH302 UDZSTE175.6B [ZD]
DH301 UDZSTE175.6B [ZD]
DH303 UDZSTE175.6B [ZD]
DH304 UDZSTE175.6B [DZ]
DH307 UDZSTE175.6B [DZ]
DH305 UDZSTE175.6B [DZ]
DH308 UDZSTE175.6B [ZD]
DH306 UDZSTE175.6B [DZ]
+5V_A
RH347 10K
RH326 82K
RH325 82K
RH319 100K
RH317 100K
QH307 NJM2580M
RH323 100K
RH321 100K
CH313 16V0.1uF
CH314 16V0.1uF
RH331 1.5K
RH327 1.5K
RH333 1.5K
RH329 1.5K
DH315 UDZSTE174.7B [ZD]
DH316 UDZSTE174.7B [ZD]
DH313 UDZSTE174.7B [DZ]
DH314 UDZSTE174.7B [DZ]
RH332 10K
RH334 10K
RH328 10K
RH330 10K
new_SBI 046:5C
new_STI 046:5C
new_SRI 046:5C
new_SLI 046:5C
TOP 051:1C
BOTTOM 051:1C
RIGHT 051:1C
LEFT 051:1C
TPTP2 [TP]
TPBM2 [TP]
TPRT2 [TP]
TPLT2 [TP]
46H84/51H84/57H84
DIGITAL-CONVER (7/8)
SHEET-7/8

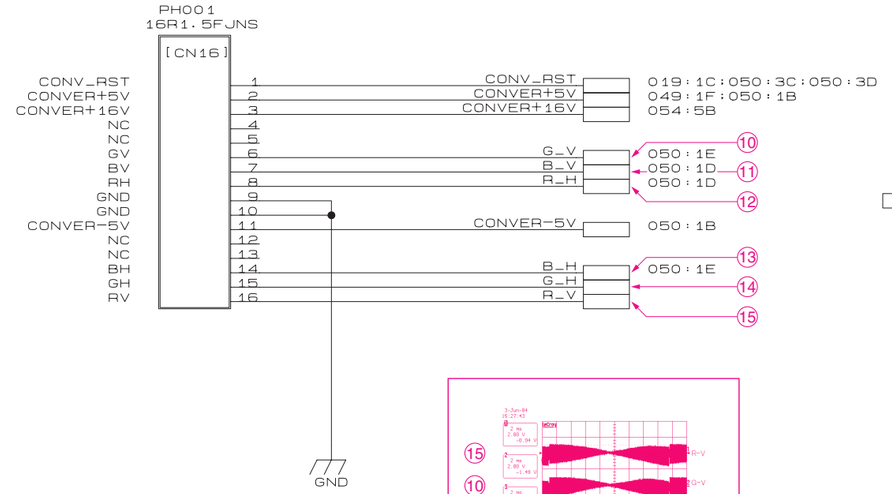


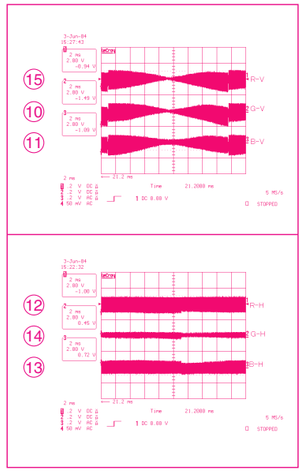



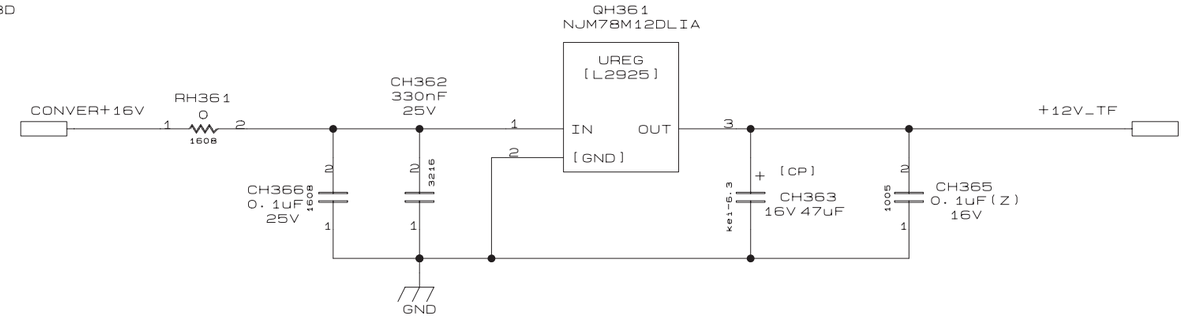



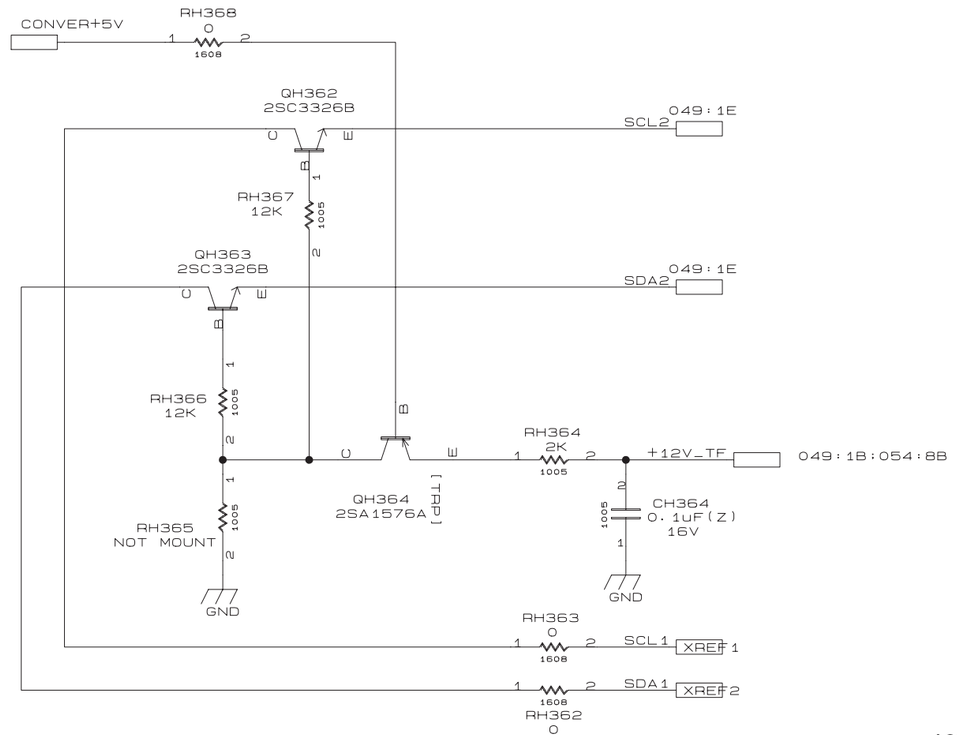




46H84/51H84/57H84
DIGITAL-CONVER (8/8)
SHEET-8/8

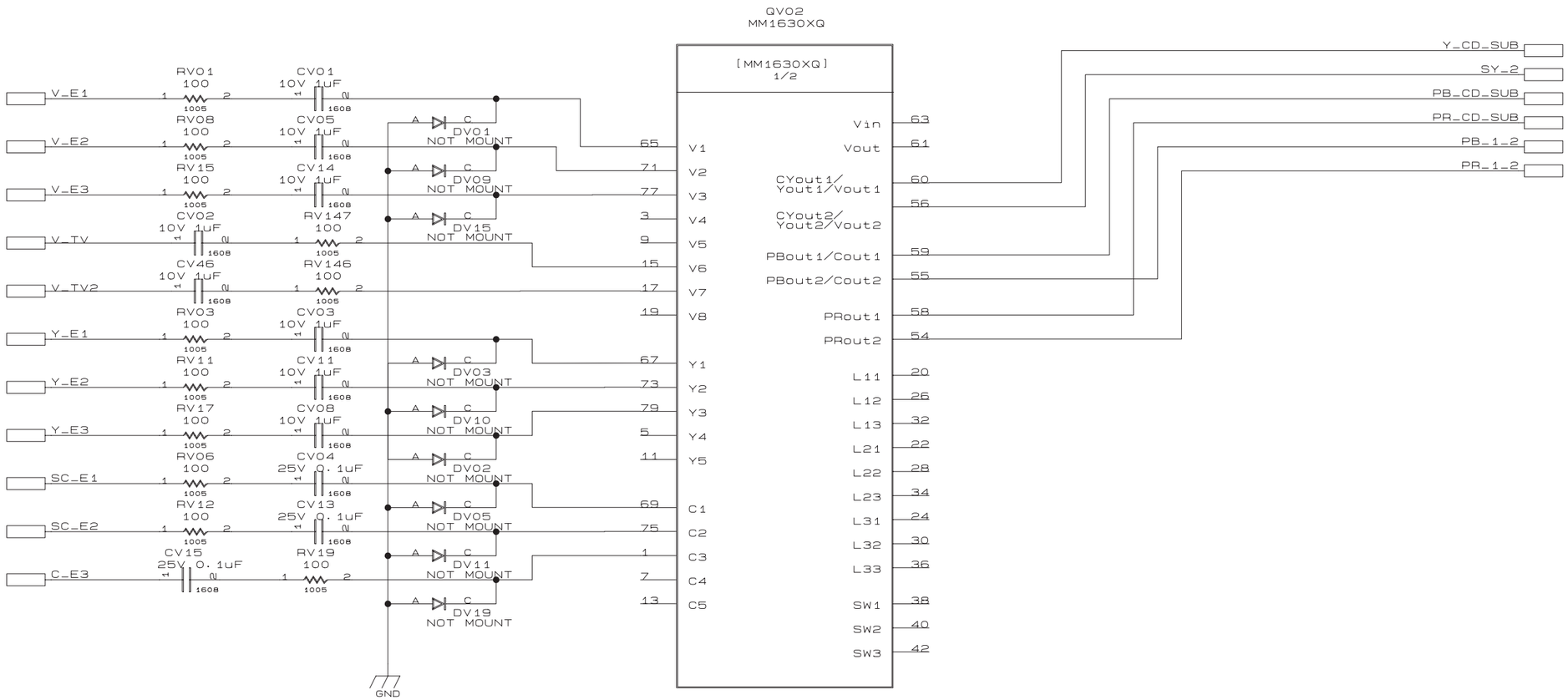


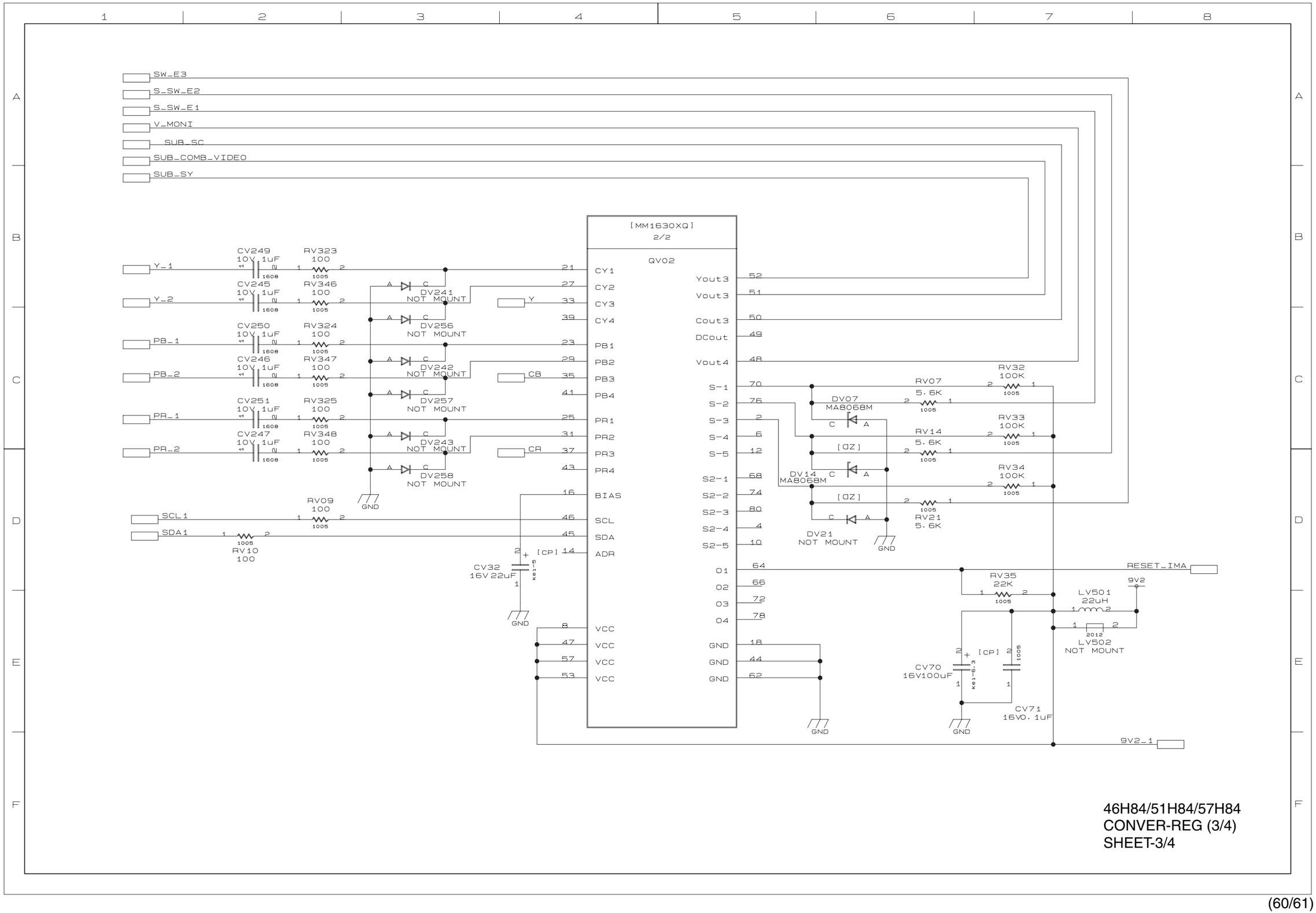



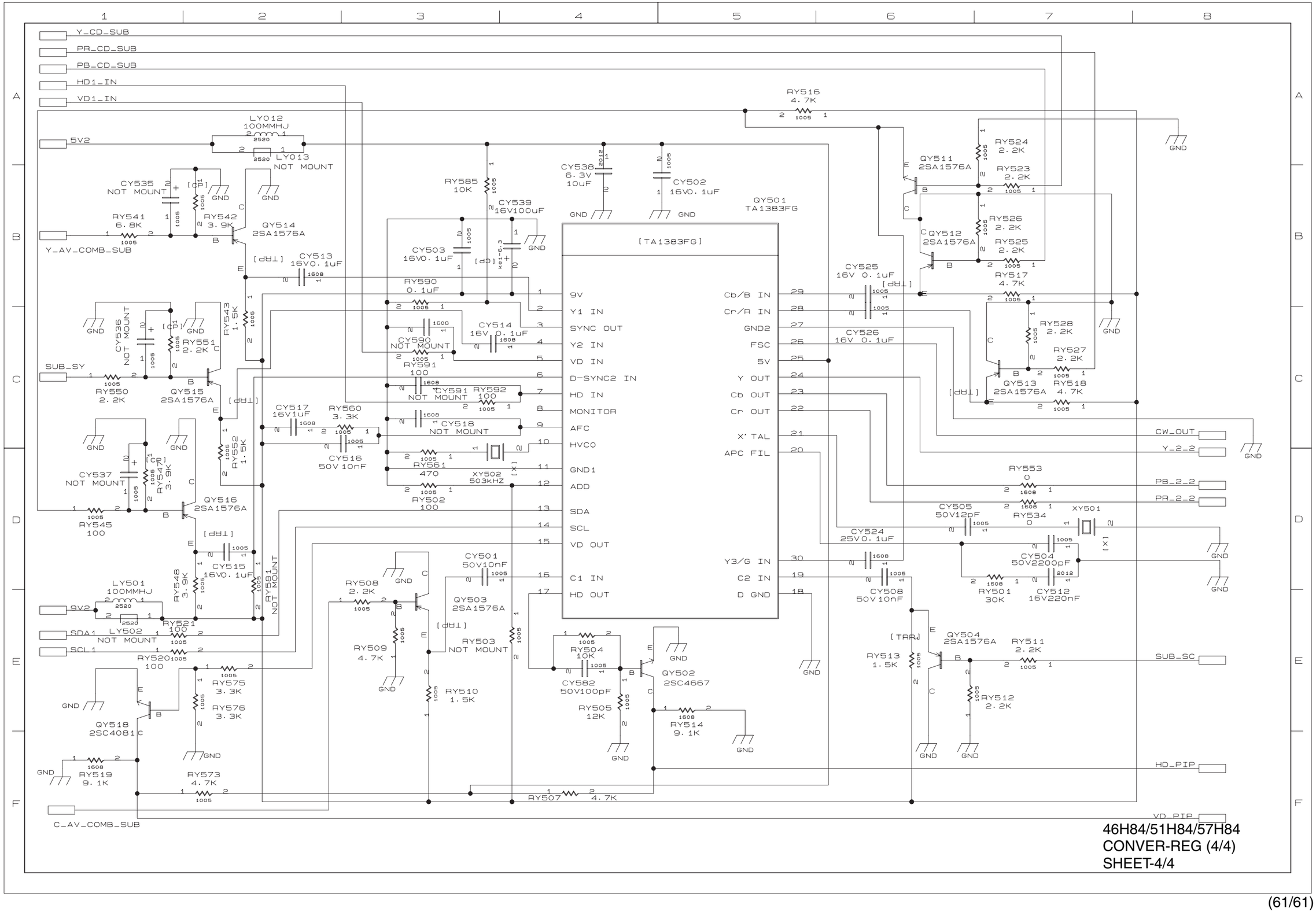

46H84/51H84/57H84
CONVER-REG (1/4)
SHEET-1/4




46H84/51H84/57H84
CONVER-REG (2/4)
SHEET-2/4




46H84/51H84/57H84
CONVER-REG (3/4)
SHEET-3/4




46H84/51H84/57H84
CONVER-REG (4/4)
SHEET-4/4